Medium Voltage Distribution

F400

Air insulated switchboard
Withdrawable circuit breaker 1 to 40.5 kV

Installation instruction
September 2009

Schneider Electric

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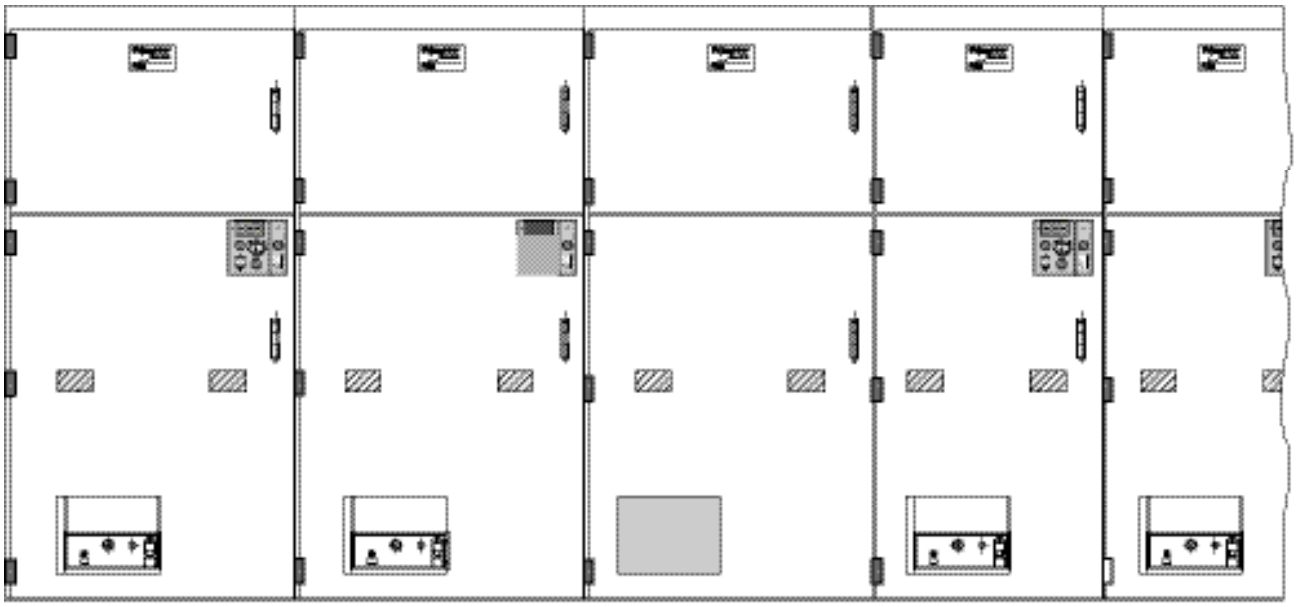
Typical switchboard arrangement

Cubicle 2500 A | Bus coupler cubicle 2500 A | Bus riser cubicle 2500 A | Cubicle 1250 A | Cubicle 1250 A

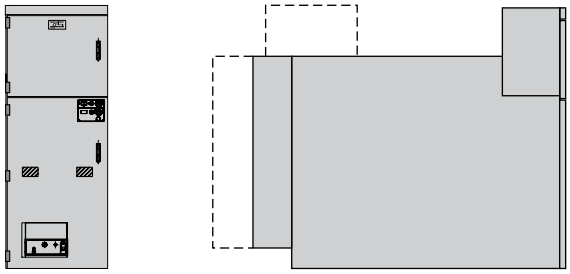


Handling instructions
Standard cubicle

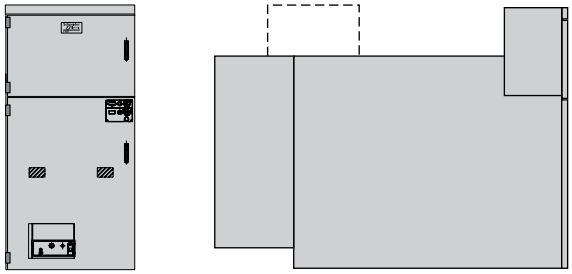
Cubicles types

Cable incoming or outgoing cubicles
simple busbar

1250 A

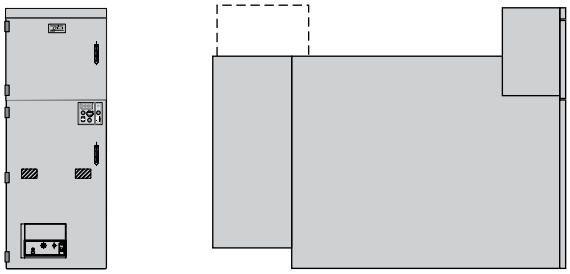


2500 A

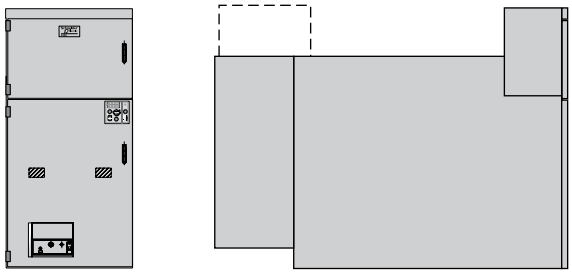


Bus coupler cubicle
simple busbar

1250 A

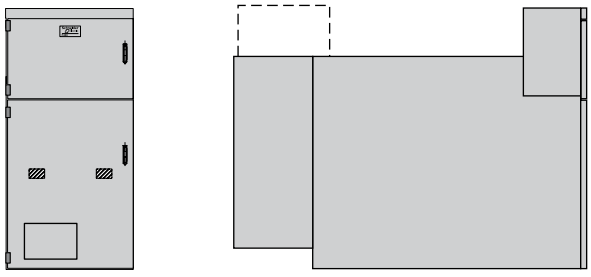


2500 A



Bus riser cubicle
simple busbar

1250 A
or 2500 A



Handling instructions
Standard cubicle

Dimensions	Incoming or outgoing cables				Bus coupling				Bus riser duct			
	1250 A	1250 A	2500 A	2500 A	1250 A	1250 A	2500 A	2500 A	1250 A	1250 A	2500 A	2500 A
Width (cm)	98	107	118	127	98	107	118	127	118	127	118	127
Height (cm) without VT	241	251	241	251	241	251	241	251	241	251	241	251
Height (cm) with VT	249	251	249	251	249	251	249	251	249	251	249	251
Depth (cm)	295* 330**	301 336	330**	336**	330	336	330	336	330	336	330	336
Weight (kg) without VT	1165	1472	1640	2005	1110	1352	1165	1530	790	1155	820	1185
Weight (kg) with VT	1390	1732	1870	2235	1230	1572	1390	1755	1010	1375	1050	1415
Type of packing	2a	4c	2a	4c	2a	4c	2a	4c	2a	4c	2a	4c

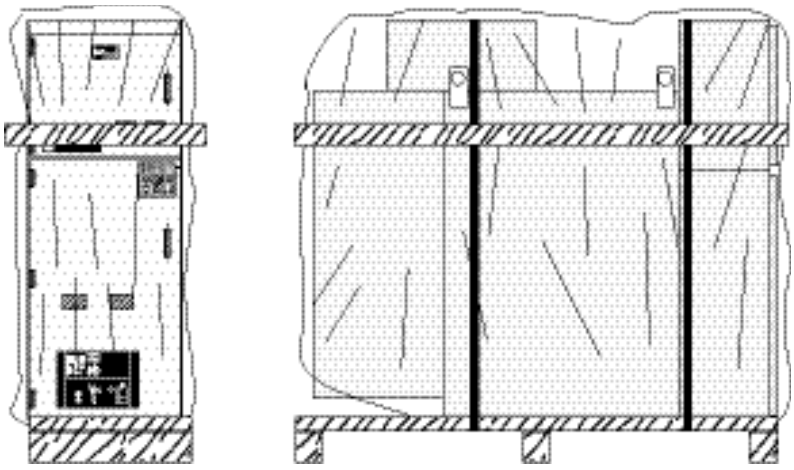
The weight of the cubicles included the weight of the circuit-breaker.

**: 2 cables per phase maximum.*
***: 4 cables per phase maximum.*

Packing

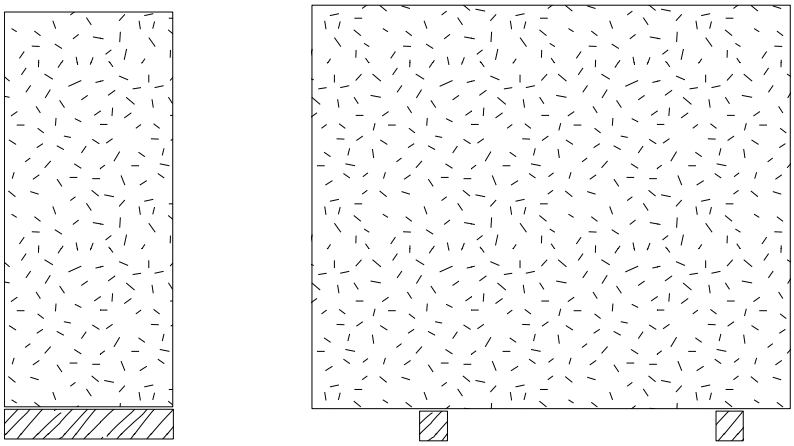
Overland transport packing (2a)

Functional unit



Sea transport packing (4c)

Functional unit



Handling

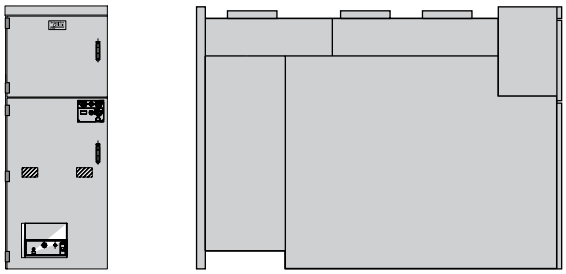
Walking on the FU roofs is forbidden.

Handling instructions
Cubicle with internal arc withstand option

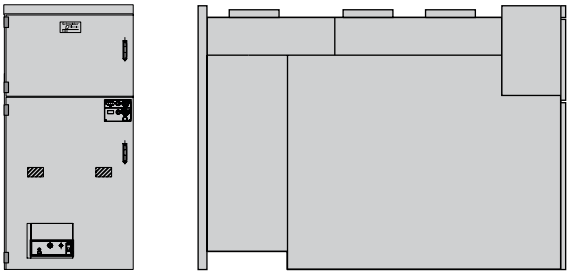
Cubicles types

Cable incoming or outgoing cubicles simple busbar

1250 A

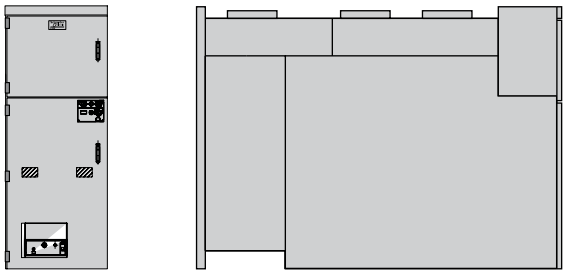


2500 A

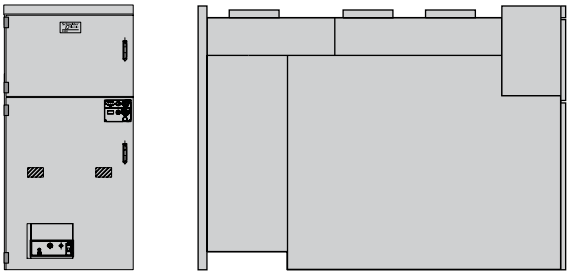


Bus coupler cubicle simple busbar

1250 A

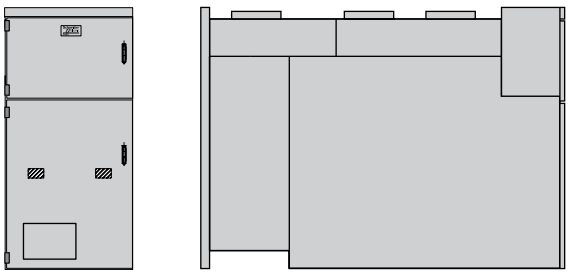


2500 A



Bus riser cubicle simple busbar

1250 A or 2500 A



Handling instructions Cubicle with internal arc withstand option

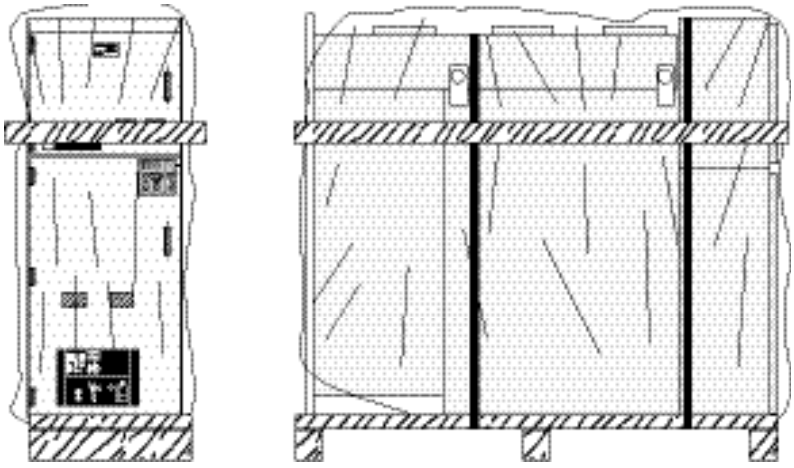
Dimensions	Incoming or outgoing cables				Bus coupling				Bus riser duct			
	1250 A	1250 A	2500 A	2500 A	1250 A	1250 A	2500 A	2500 A	1250 A	1250 A	2500 A	2500 A
Width (cm)	98	107	118	127	98	107	118	127	118	127	118	127
Height (cm) without VT	241	251	241	251	241	251	241	251	241	251	241	251
Height (cm) with VT	249	251	249	251	249	251	249	251	249	251	249	251
Depth (cm)	335	341	335	341	335	341	335	341	335	341	335	341
Weight (kg) without VT	1316	1663	1790	2160	1161	1508	1313	1683	940	1310	970	1340
Weight (kg) with VT	1537	1884	2009	2379	1382	1729	1542	1912	1161	1531	1200	1569
Type of packing	2a	4c	2a	4c	2a	4c	2a	4c	2a	4c	2a	4c

The weight of the cubicles included the weight of the circuit-breaker.

Packing

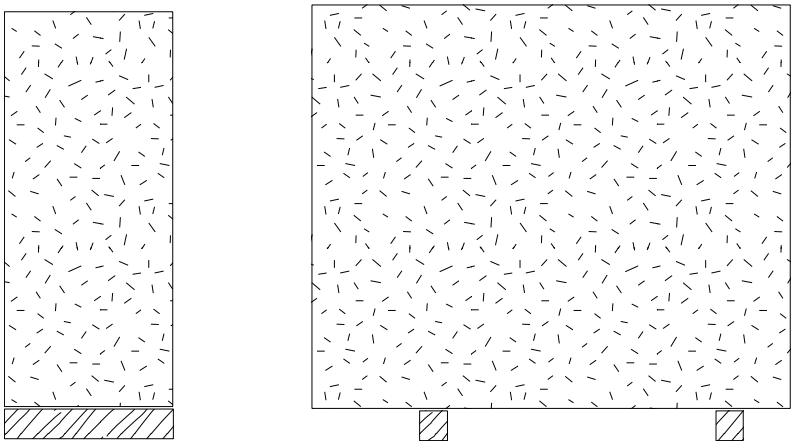
Overland transport packing (2a)

Functional unit



Sea transport packing (4c)

Functional unit



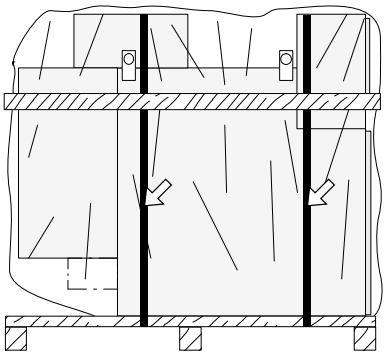
Handling

Walking on the FU roofs is forbidden.

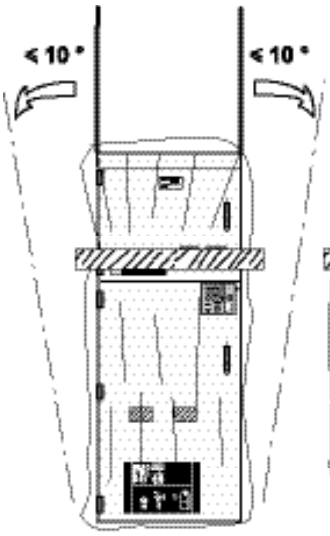
Handling instructions

Handling by lifting

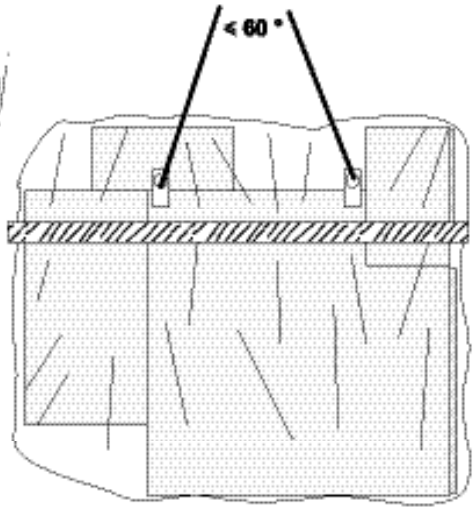
Functional unit



Remove the transport hoops.

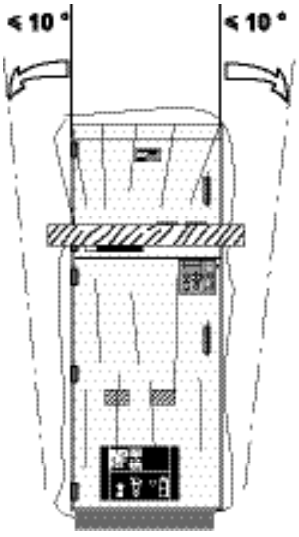


Sling up the device using the lifting lugs.
Provide 2 m slings as a minimum.

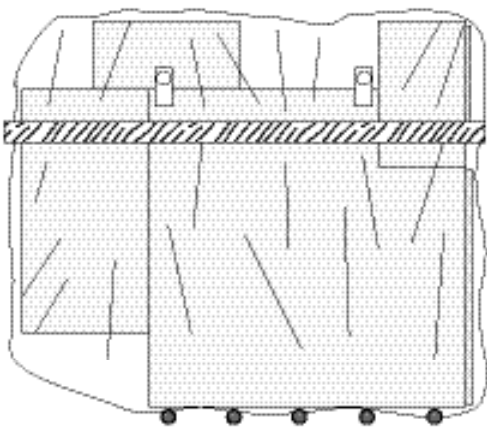


The slings must not form an angle higher than 60°.
Cubicle gradient must not exceed 10°.

Handling by rolling

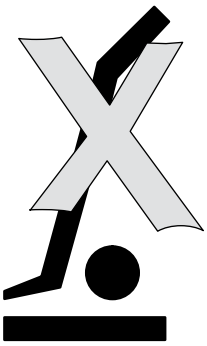


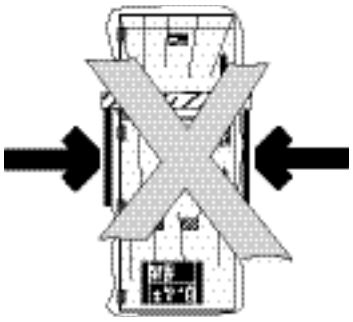
Proceed as shown opposite.

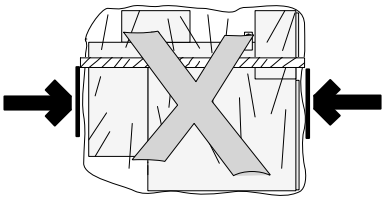


Be careful not to distort the cubicle floor bearing surface.

Handling instructions



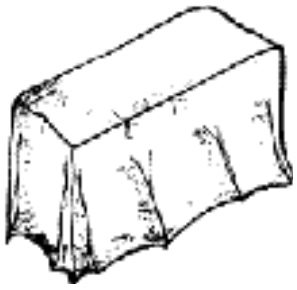


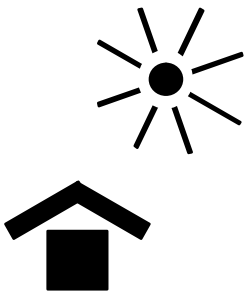


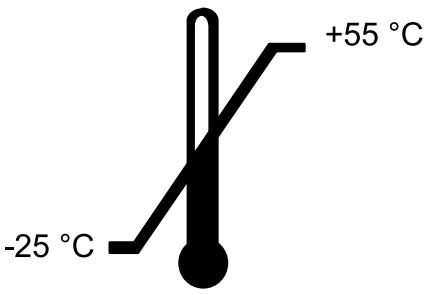
Storage

When stored, the equipment must remain in its original packing.

It must be placed on a dry floor or dampinsulating material.







Prolonged storage

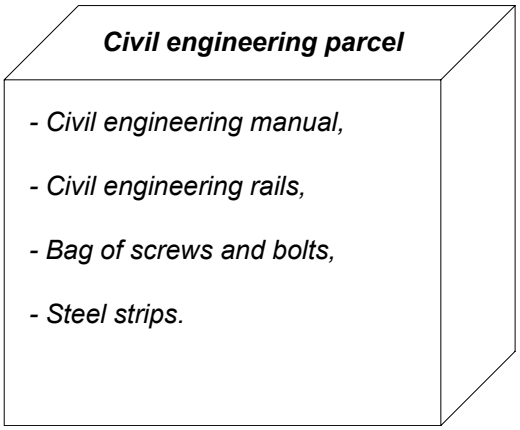
For prolonged storage, the device must remain in its original packing.

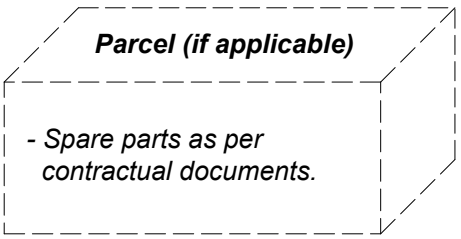
After prolonged storage, care must be taken to thoroughly clean all insulating parts by means of a dry, clean cloth prior to use.

List of bags and accessories

Switchboard packing list

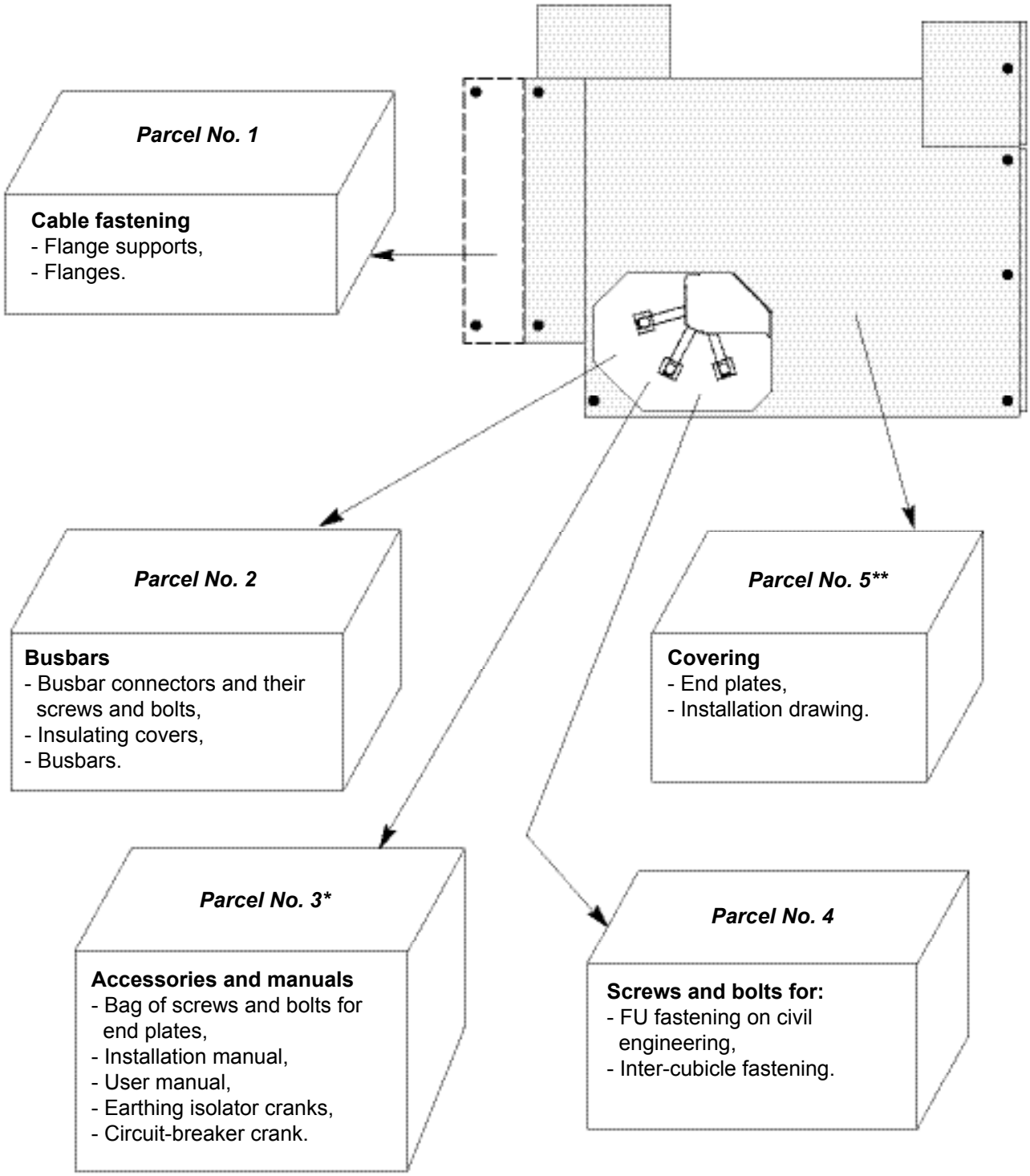
Important recommendations:
■ Unpack the parcels at the time of installing the devices that they contain.





Handling instructions
Standard cubicle

Cubicle packing list:



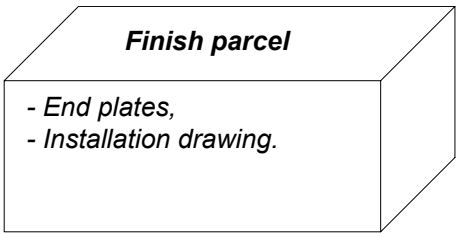
(*) Parcel No. 3 is located in the first cubicle of the switchboard (as per single-wire diagram)**.**

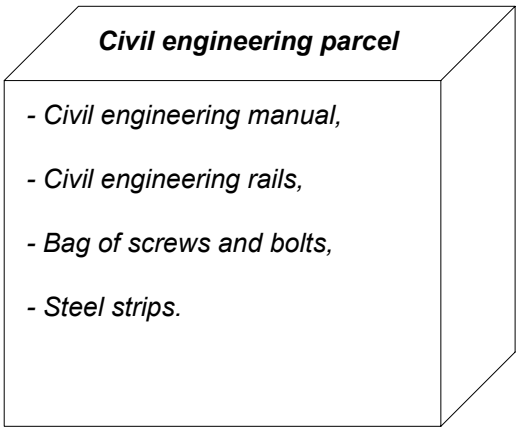
(**) Parcel No. 5 is located with the first and last cubicle of the switchboard.

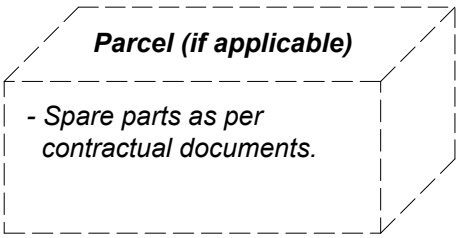
List of bags and accessories

Switchboard packing list

Important recommendations:
■ Unpack the parcels at the time of installing the devices that they contain.

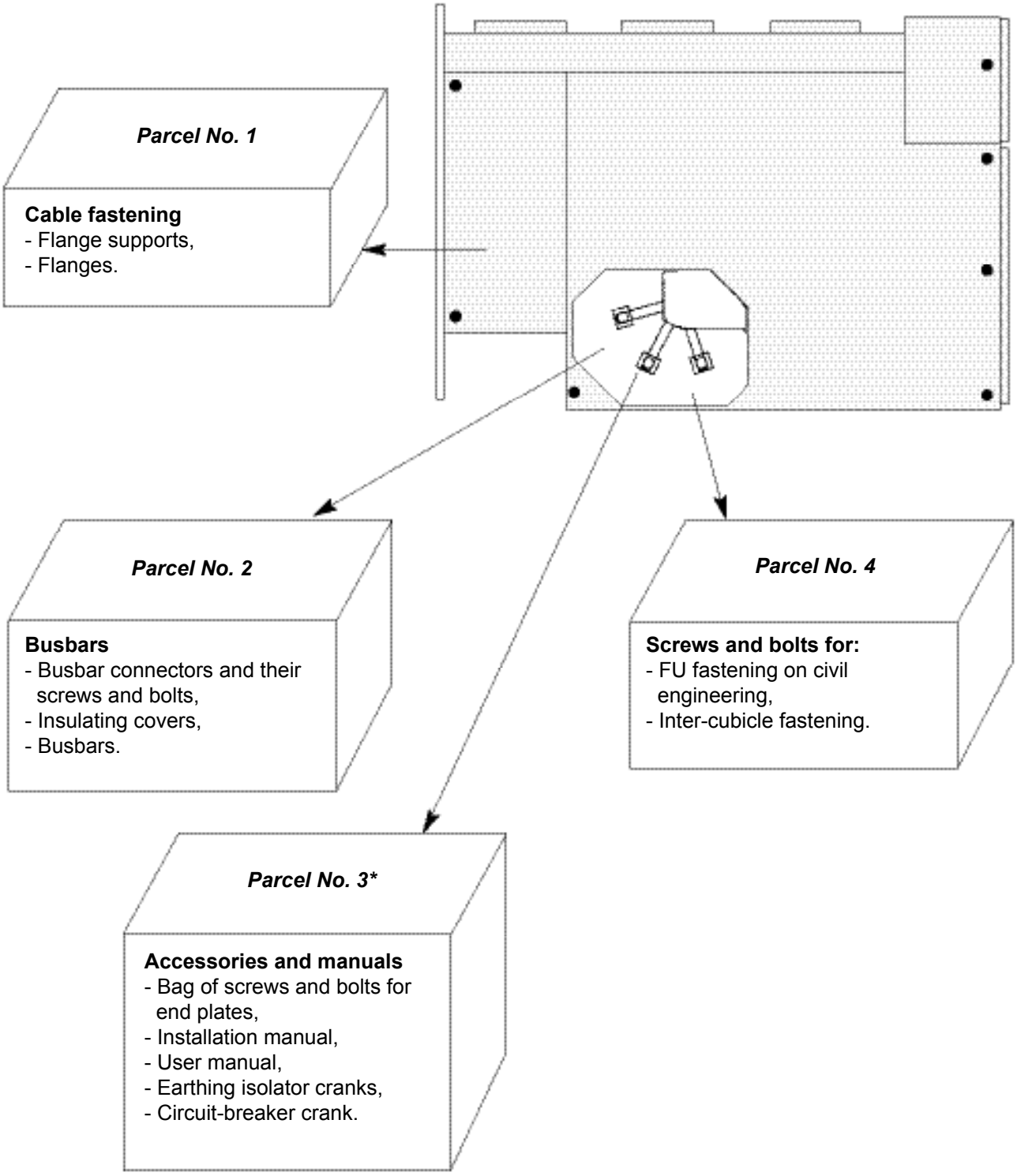






Handling instructions
Cubicle with internal arc withstand option

Cubicle packing list:



(*) Parcel No. 3 is located in the first cubicle of the switchboard (as per single-wire diagram)**.**

Unpacking the cubicles

The cubicles must be prepared in the room where they are going to be fitted.

Avoid impacts and deformation.
Unpack the cubicle by removing the wooden uprights and then the plastic cover.
Do not remove any component from the cubicles.

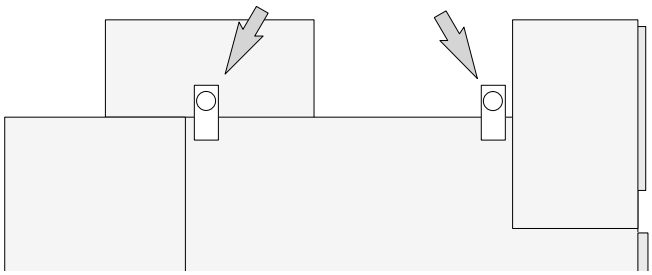
Do not remove the parcels of accessories placed in the compartments, except for parcel No. 3 located in the busbar compartment of the first and/or last cubicle as the case arises.
It contains the manuals and operating accessories.
These parcels must be opened only at the time of installing the devices that they contain.

Equipment identification

After unpacking, check that the features and descriptions marked on the cubicle rating plates meet the requirement given in the contractual documents.

Installing the cubicles in the switchboard

Installing the cubicles on the civil engineering

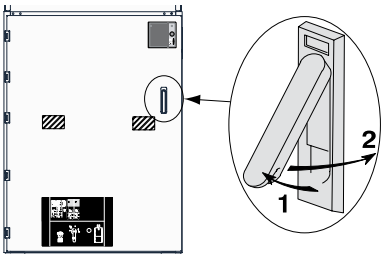


Check conformity of civil engineering by referring to the Civil Engineering Guide No. 07897174.
The horizontal position of the mounting rail in particular must be checked before the cubicles are positioned.
By referring to the front side drawing and to the single-wire diagram, start installation with the cubicle in the middle of the switchboard.
This handling can be performed par lifting or by rolling.

After handling, remove the lifting lugs and their screws and bolts before coupling the cubicles.
The lugs, screws and bolts must be kept for subsequent handling operations.
Repeat these steps with the next cubicles,
positioning them on either side of the central cubicle.

Installation instructions
Standard cubicle

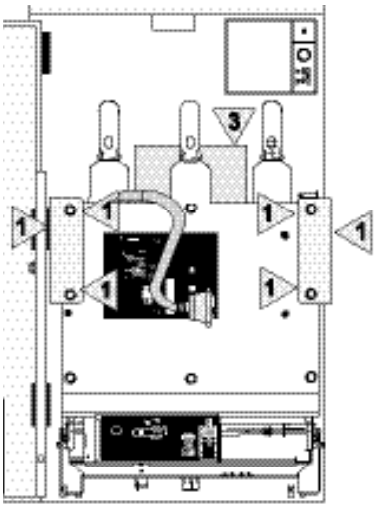
Removing the transportation devices from the removable part

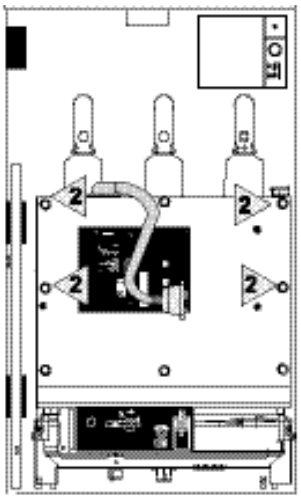


Open the access door to the removable part by pulling and then rotating the handle rightwards.

Operating instruction:

1: remove the 2 transport reinforcements (3 screws per reinforcement).
2: fit the 4 mounting screws of the front plate and contact washers.
Tightening torque: 8.5 Nm.
3: flap locking kit.



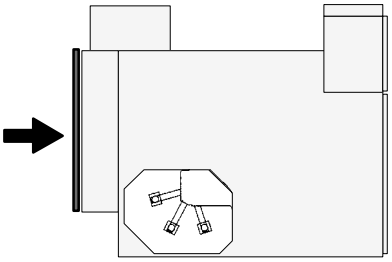


How to extract the removable part (front plate with black background)

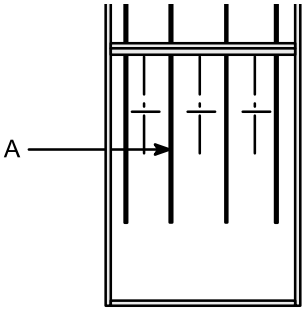
To extract the removable part and close the door, refer to "**Operating Instructions**", in user manual no. 07897171.

Removing the panels

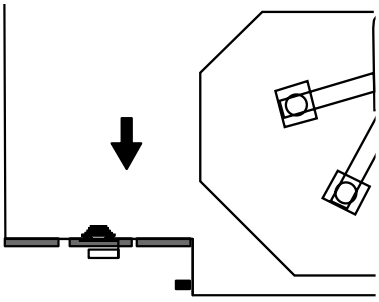
To have access to mounting points, remove the parts opposite:



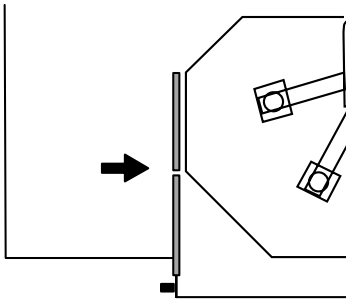
Remove the cable compartment panel.



Remove bindings from shields **A** (bindings positioned for transport purposes). Remove the four shields **A** by pulling them.



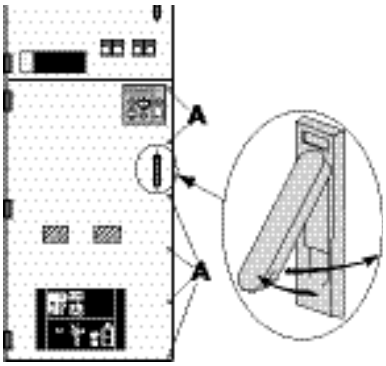
Remove the cable bushing plates.



Remove the panels providing access to the busbar compartment, from the rear of the cubicles.

Installation instructions
Cubicle with internal arc withstand option

Removing the transportation devices from the removable part

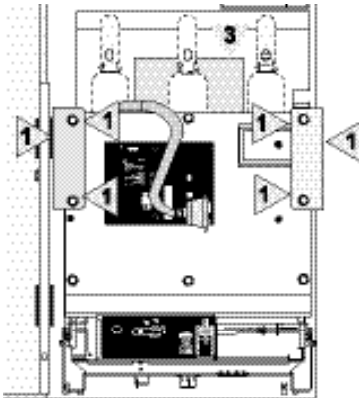


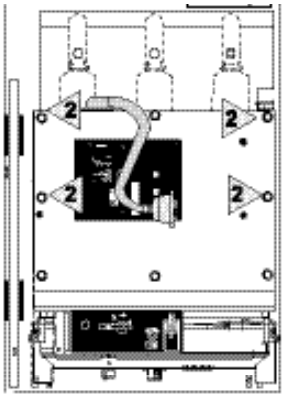
Opening the access (MV) door:
1: untight the 6 black pins **A** and be sure that they move freely.
2: pull the handle.
3: rotate the handle rightwards.

Closing the access (MV) door:
1: tight the 6 black pins **A** and be sure that the door mounted in the true position.
2: rotate the handle leftwards.
Be carefull if you feel that you are using extra force don't do it, just untight the black pins and repeat line item 1.
3: push the handle to its housing.

Operating instruction:

1: remove the 2 transport reinforcements (3 screws per reinforcement).
2: fit the 4 mounting screws of the front plate and contact washers.
Tightening torque: 8.5 Nm.
3: flap locking kit.



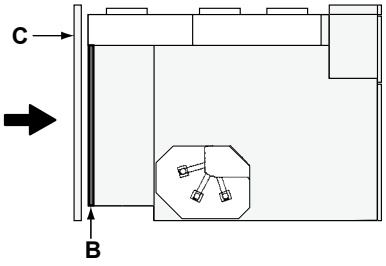


How to extract the removable part (front plate with black background)

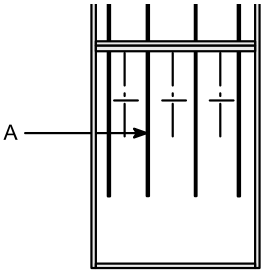
To extract the removable part and close the door, refer to "**Operating Instructions**", in user manual no. 07897171.

Removing the panels

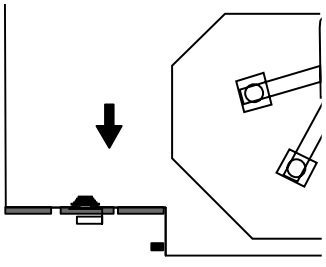
To have access to mounting points, remove the parts opposite:



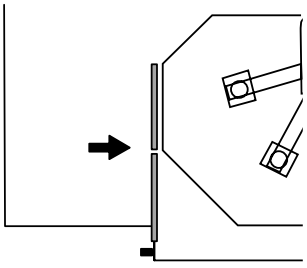
Remove the cable compartment panel.



Remove bindings from shields **A** (bindings positioned for transport purposes). Remove the four shields **A** by pulling them.



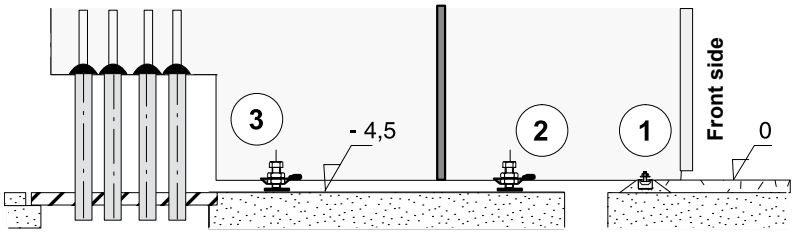
Remove the cable bushing plates.



Remove the panels providing access to the busbar compartment, from the rear of the cubicles.

Floor mounting and cubicle adjustment

Note: *fastening accessories are supplied in parcel No. 4 located in the busbar compartment (refer to Civil Engineering Guide No. 07897174).*

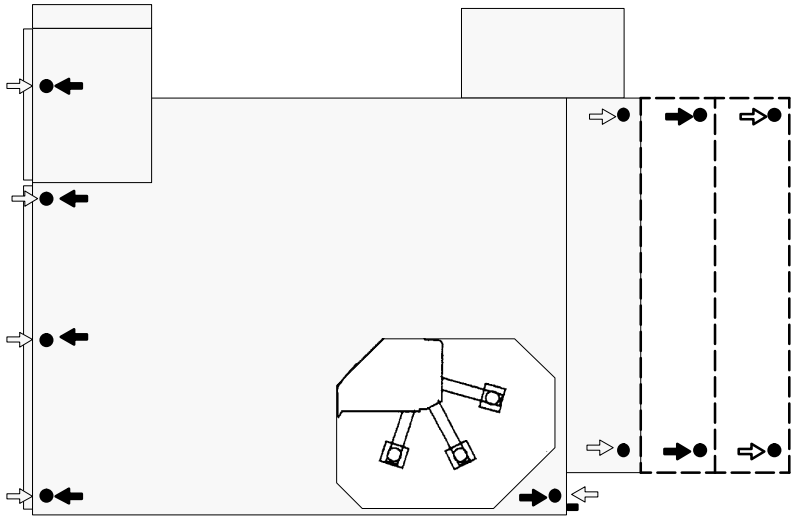


After the removable part has been extracted from the cubicle and the panels have been removed, access to fastening and ajustment points is available:
1: 2 mounting nuts on the rail embedded in the floor in the front part of the removable part compartment.
2: 2 adjustment jacks in the removable part compartment.
3: 2 adjustment jacks in the busbar compartment.

Using jacks **2** and **3**, adjust the horizontal position of the cubicle by means of a level.
It is important for the rolling plane of the removable part to be horizontal.
Lock the counternuts of jacks **2** and **3** in position.
Lock nuts **1** in position.

Fastening cubicles to one another

Note: *the necessary screws and bolts are contained in parcel no. 4 located in the busbar compartment.*
The cubicles are fastened to one another by 7 points.



Bolt the front and rear sides to one another as indicated.

2 670 mm deep cubicles

3 020 mm deep cubicles

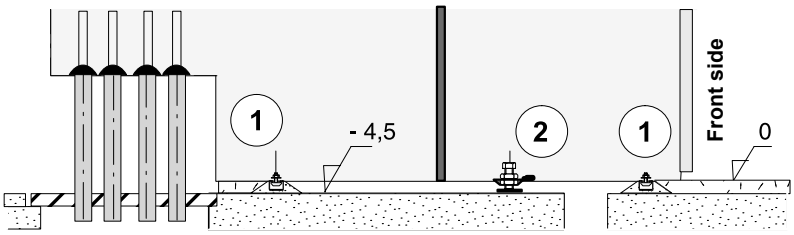
Plug-in check

Whenever a cubicle has been fastened to the floor and to the previous cubicle, use the circuit-breaker to check that plug-in and interlocking as well the opening and closing of the flaps are performed correctly.

For the insertion and plug-in of the removable part and closing of the door, refer to “**Operating Instructions**” in user manual no. 07897171.

Floor mounting and cubicle adjustment

Note: *fastening accessories are supplied in parcel No. 4 located in the busbar compartment (refer to Civil Engineering Guide No. 07897174).*

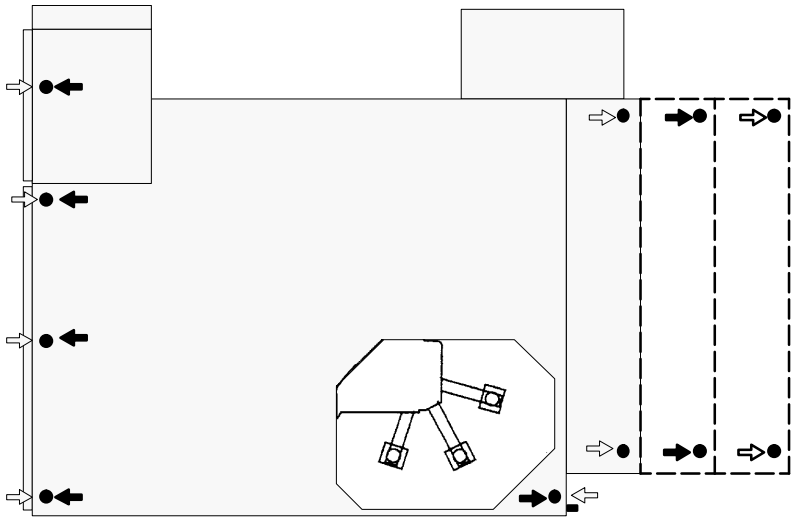


After the removable part has been extracted from the cubicle and the panels have been removed, access to fastening and ajustment points is available:
1: 4 mounting nuts on the rail embedded in the floor at the front and the rear.
2: 2 adjustment jacks in the removable part compartment.

Using jacks **2**, adjust the horizontal position of the cubicle by means of a level.
It is important for the rolling plane of the removable part to be horizontal.
Lock the counternuts of jacks **2** in position.
Lock nuts **1** in position.

Fastening cubicles to one another

Note: *the necessary screws and bolts are contained in parcel no. 4 located in the busbar compartment. The cubicles are fastened to one another by 7 points.*



Bolt the front and rear sides to one another as indicated.

⇨ 2 670 mm deep cubicles

➡ 3 020 mm deep cubicles

Plug-in check

Whenever a cubicle has been fastened to the floor and to the previous cubicle, use the circuit-breaker to check that plug-in and interlocking as well the opening and closing of the flaps are performed correctly.

For the insertion and plug-in of the removable part and closing of the door, refer to "**Operating Instructions**" in user manual no. 07897171.

Electrical connections

Screws and bolts and tightening torque

Note: *all the necessary screws and bolts are supplied, except for the MV cable connection.*

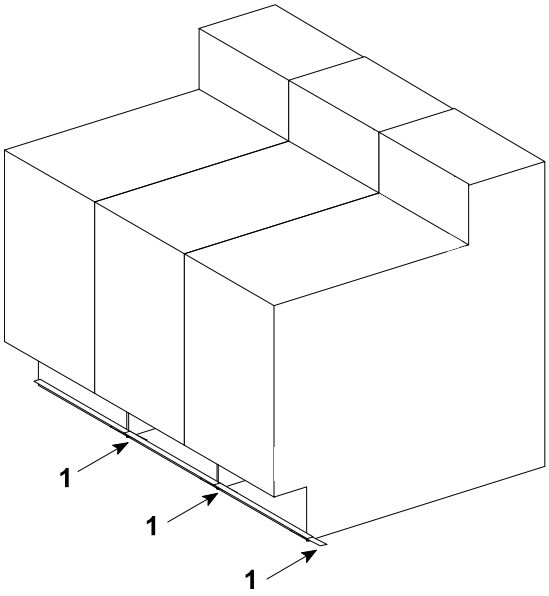
Screws and bolts to be used:
Bolt joint for MV and LV indoor equipment.
Class 8.8 as per Standard NF E 27 005, i.e. yield strength, Re ⩾ 627 Nm / mm2.
The screws and bolts must not be lubricated.

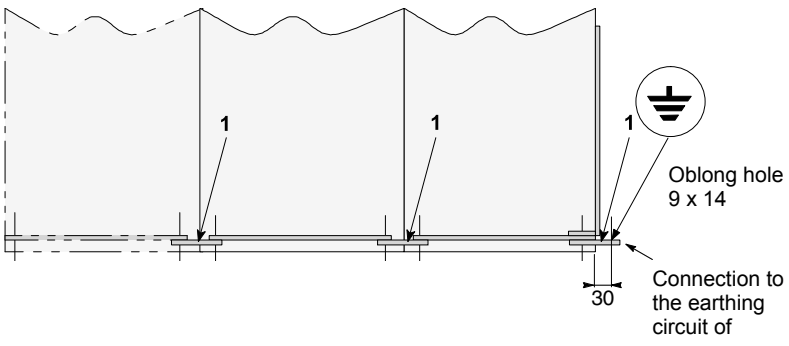
Tightening torque
The connections must be tightened by means of a torque wrench, complying with the following torques:

Screw	Torque in Nm
Ø 6	13
Ø 8	28
Ø 10	50
Ø 12	75
Ø 14	120

Application method:
The force of the bolts tightened to the recommended torques is better distributed thanks to the use of spring washers located on the outer surfaces of the terminal pads and busbars.
If disassembly is performed, replace spring washers.

Connection of the earth bar





Fasten the fishplates **1** of the switchboard main earth bar to ensure the electrical continuity of the various metal frames.

Connect the main earth bar to the earthing circuit of the switchboard end substation.

Mounting the busbars

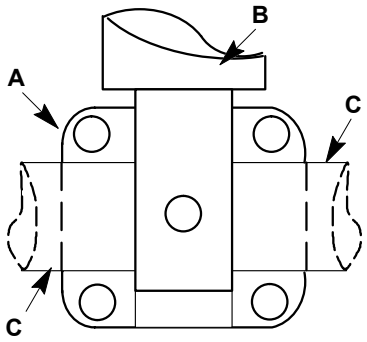
In parcel no. 2 located in the busbar compartment, you will find:

- ☐ the busbars,
- ☐ connectors and associated screws and bolts,
- ☐ insulating covers.

Warning: *the bars and all the contact surfaces must be clean on mounting.*

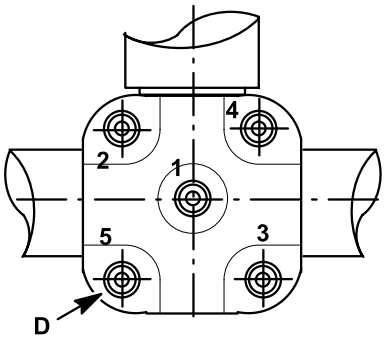
Intermediate busbars

A: connector half
B: bushing
C: bare or insulated bars
D: hex socket screw ø 14 + washer
E: cover half.

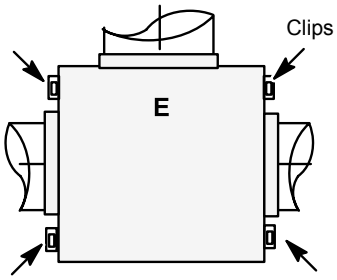


1: assemble the bars and connectors and fit the fasteners

Warning: *the sequence of operations and tightenings MUST be complied with.*



2: bring up the screws and nuts to the limit stop in the order shown below, but do not lock them in position:
1-2-3-4-5
3: using a torque wrench, tighten the screws in the order recommended above in 2 successive runs.
- ■ 1st run to a **de 25 Nm** torque.
- ■ 2nd run to a final torque of **75 Nm.**



4: assemble the 2 cover halves **E** by exerting pressure on clips.

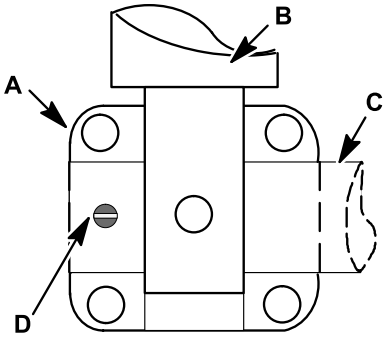
End busbars

A: connector half
B: bushing
C: bare or insulated bars
D: screwed-on sleeve
E: hex socket screw ø 14 + washer
F: cover
G: binding.

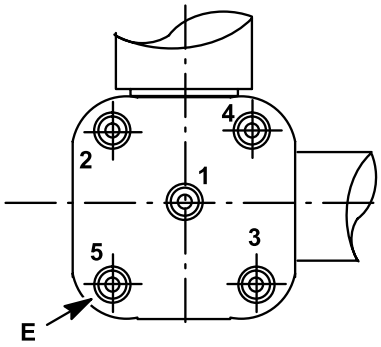
Warning: *the sequence of operations and tightenings MUST be complied with.*

Note: *in this case, a sleeve* **D** *is screwed onto a connector half.*

End

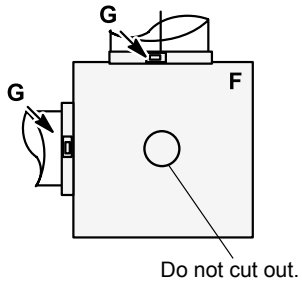


1: assemble the bars and connectors and fit the fasteners



2: bring up the screws and nuts to the limit
stop in the order shown below, but do not
lock them in position:
1-2-3-4-5
3: using a torque wrench, tighten the screws
in the order recommended above in 2 successive runs.

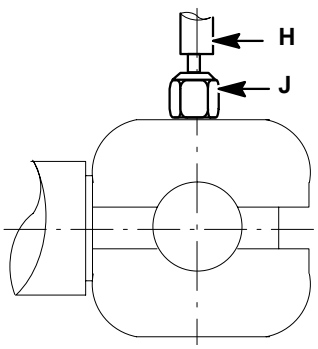
- 1st run to a **de 25 Nm** torque.
- 2nd run to a final torque of **75 Nm.**



4: fit the insulating cover **F** on the connector.
Lock it in position by means of two plastic bindings **G**.

Specific case: connectors with connections to the busbar VTs

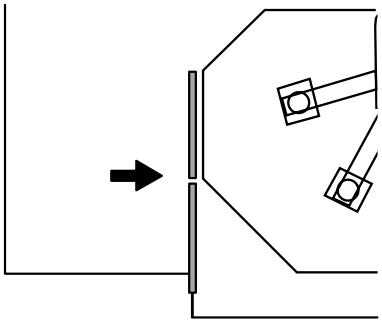
H: connection bar to VT
J: nut.



Remove the cover by sliding it on the VT connection bar.
After loosening the 5 nuts, mount the busbars as indicated previously.
The sequence of operations and tightenings MUST be complied with.
Position the cover by sliding it on the VT connection bar.
Using bindings, fasten it in the same way as for the end connectors.

In this case, the connection bars **H** to the VTs are fastened to the connectors by means of nut **J**.
These connectors and their insulating covers are supplied already fitted in the cubicle.

Closing the busbar compartment

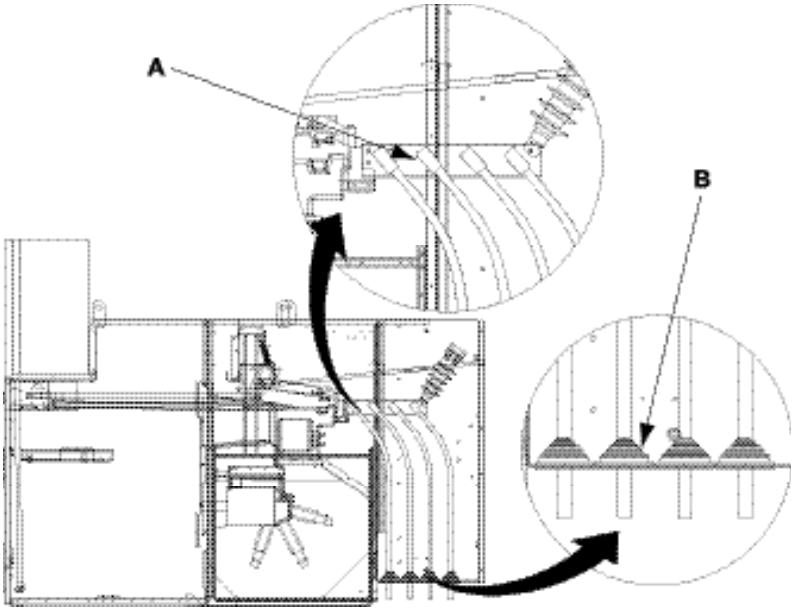


After mounting the busbars, check the cleanliness of the compartment.
On all the cubicles, put back the busbar compartment closing plates before connecting MV cables.

Connecting the MV cables

A: MV cable connection terminal pads.
B: cable compartment bottom plate.

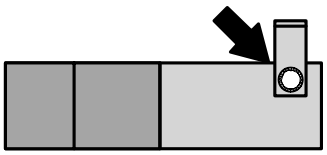
Note: *the MV cable accessories (insulating end, lugs, screws and bolts, etc.) are not supplied.*



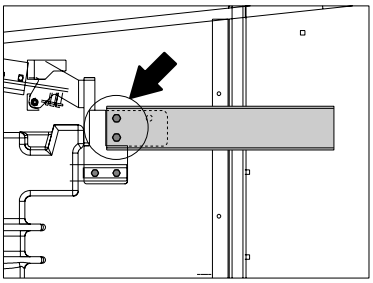
Drilling the connection terminal pads

The terminal pads are to be drilled according to the type of lugs selected.

In standard version, the cable connection terminal pads are not drilled.
In this case, dismantle the terminal pads.



Remove the cable connection terminal pads by removing the insulator mounting screw as well as the screws that secure the terminal pad to the functional CT's.

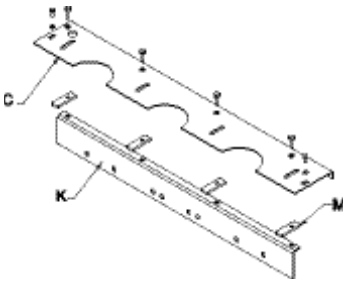


After drilling the terminal pads, start installing in the reverse order, complying with the tightening torque (see Note related to electrical connections).

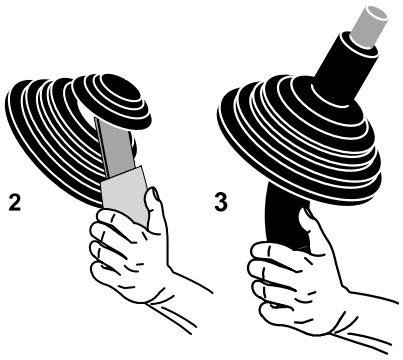
Mounting the cables

Note: *before mounting the cables, check that the access panels to the busbar compartment are mounted (refer to "**Mounting the busbars**" Section).*

The bag containing the cable fasteners is located in parcel No. 1 located in the cable compartment.

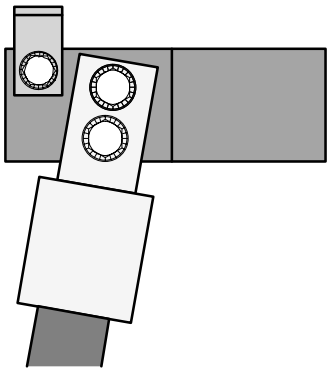


1: fit angle bracket **K** with spacers **M** under plate **C**.

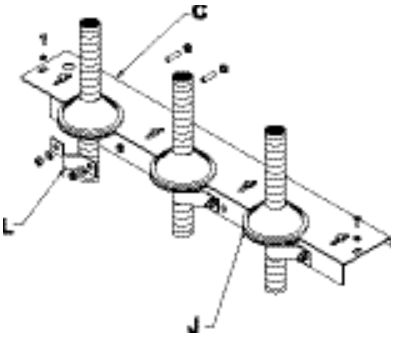


2: cut cable bushings J to the right diameter.
3: insert the cables before their ends are made.

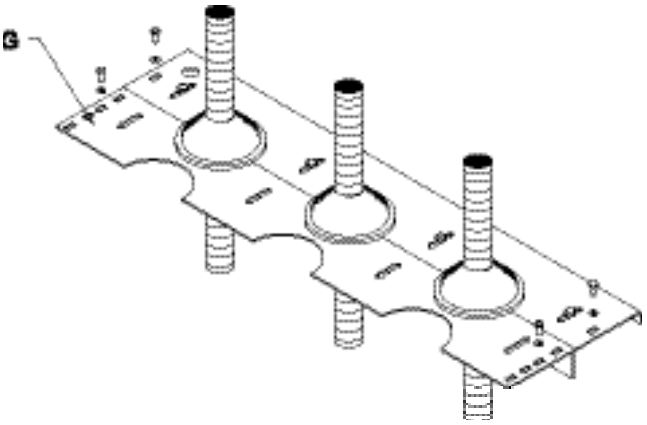
Mounting with 1 row of cables



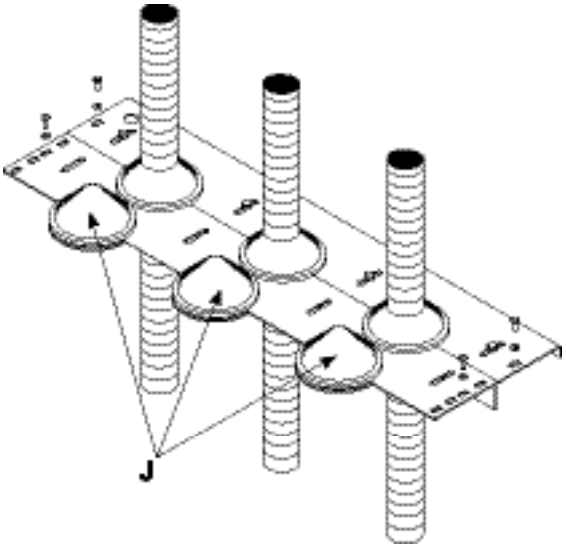
4: bolt the first row of cables to the connection terminal pads, complying with the recommendations provided in paragraph "**fasteners and tightening torque**".



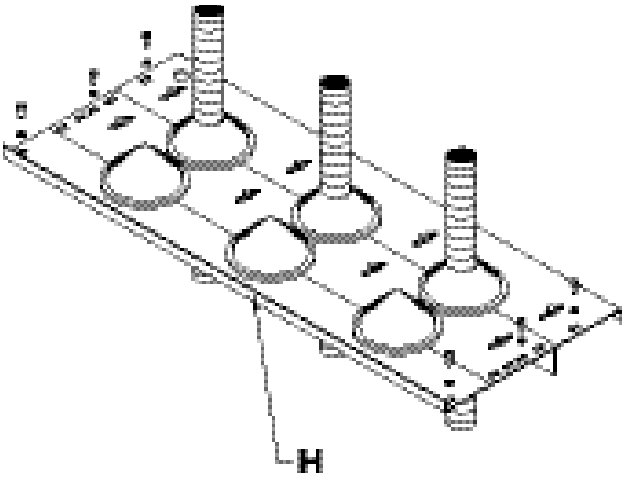
5: mount precut cable bushings **J** on plate **C**.
Fasten cables to bracket by means of flanges **L**.



6: fit second plate **G**.

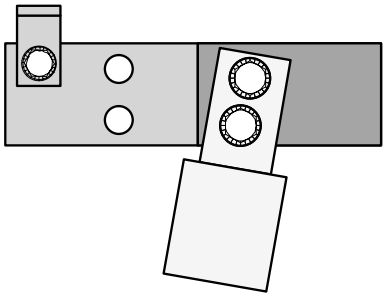


7: fit cable bushings **J** not cut out.

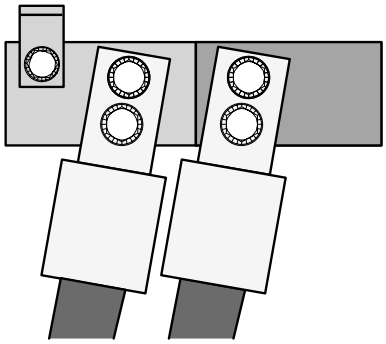


8: fit third plate **H**.

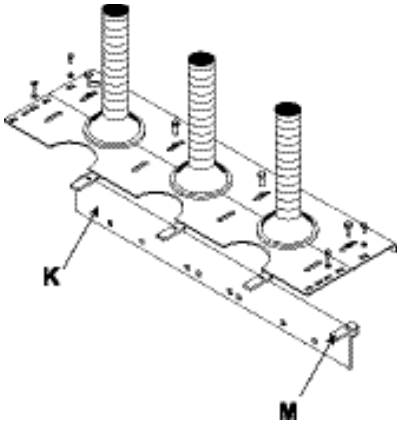
Mounting with 2 rows of cables



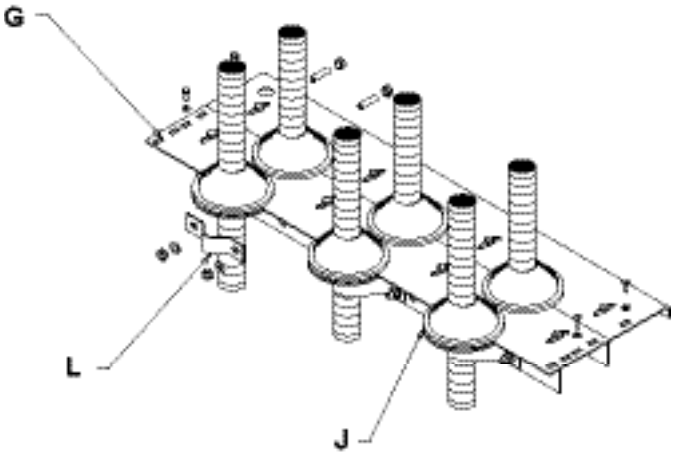
1: bolt the first row of cables.



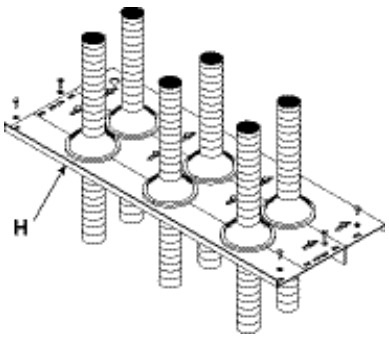
2: then bolt the second row of cables to the connection terminal pads.



3: fit angle bracket **K** with spacers **M** under plate **G**.



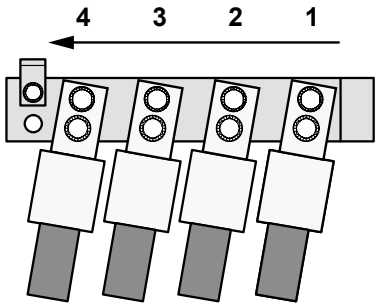
4: mount precut cable bushings **J** on plate **C**.
Fasten cables to bracket by means of flanges **L**.



5: fit third plate **H**.

Mounting with 3 or 4 raws of cables, cubicle 1250 A

Start to mount bottom plates as indicated in the previous pages.

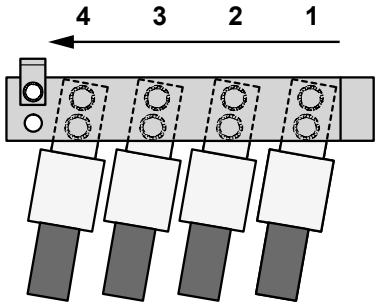


Bolt the row of cables from the right to the left.

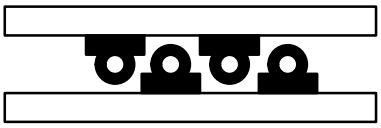
Mounting with 3 or 4 raws of cables, cubicle 2500 A

Only the position for the connection of cables to the terminal pads is different.

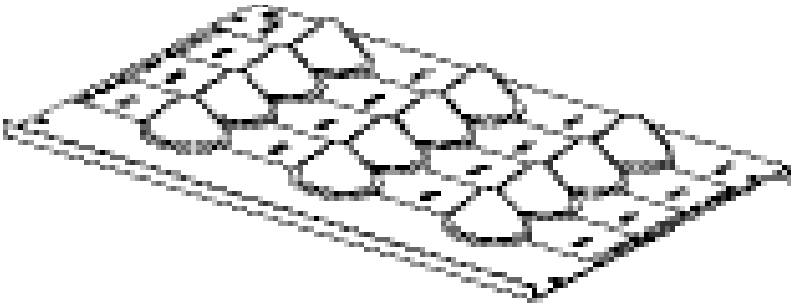
Start to mount bottom plates as indicated in the previous pages.



Bolt the row of cables from the right to the left.

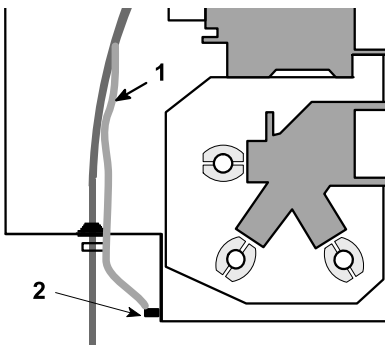


Cables are fitted in a staggered arrangement.



Mounting bottom plates with 3 or 4 rows of cables.

Earthing the MV cable shields



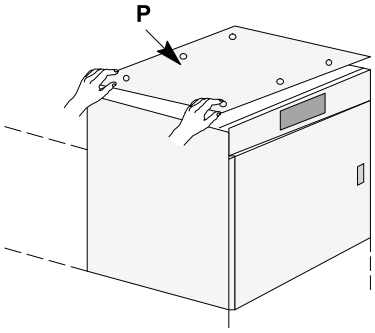
Connect bonding jumpers **1** of the MV cable shields to the main earth bar **2** of the switchboard.

Note: *insert jumper with cable through cable bushing.*

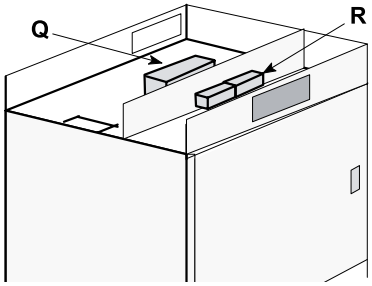
Connecting the LV cables

Access to connection terminal blocks

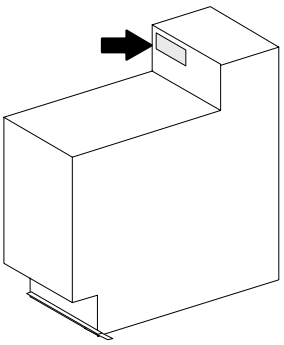
P: plate
Q: terminal block
R: terminal block
S: trough
T: aperture.



LV terminal blocks are located at the top of the LV compartment.
Loosen fastening screws and remove roof **P**.

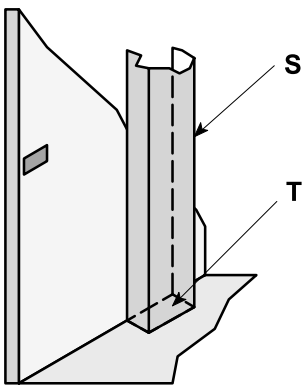


Q: connection terminal block.
R : auxiliary supply earth bar terminal block.

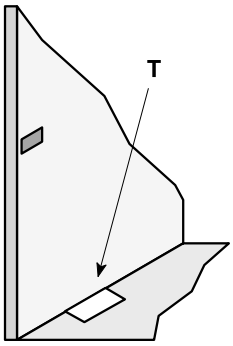


1: through the rear part of the LV compartment.

LThe low voltage wiring can enter the cubicle in 2 different ways depending on the equipment.



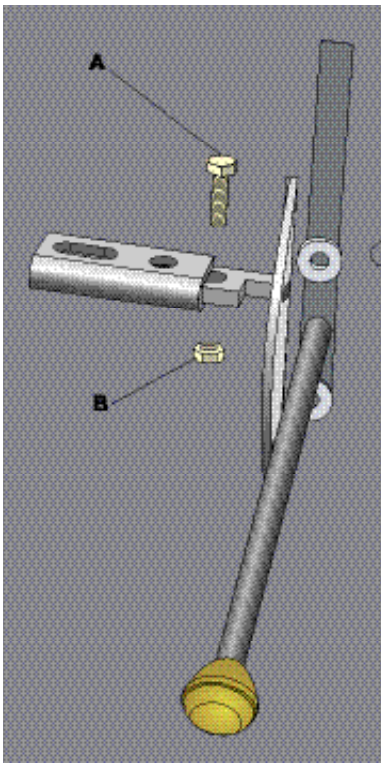
2: through the bottom of the circuit-breaker compartment of each cubicle, with trough **S**, and aperture **T** communicating with the duct.
Max. quantity of cables: 8.
Multicore cable ø 20 mm.



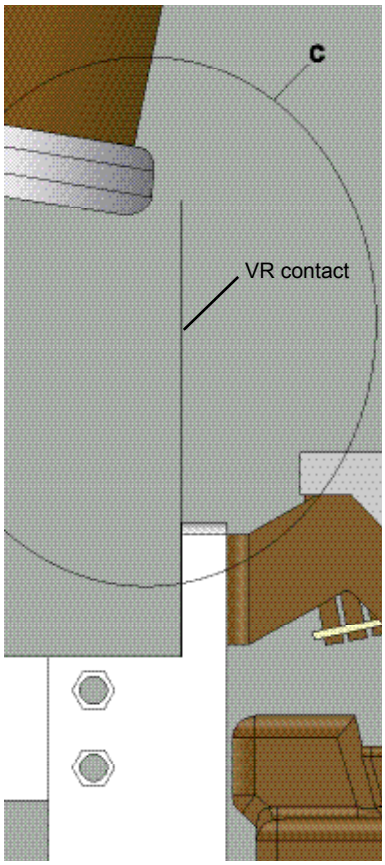
To have access to aperture **T**, remove trough **S** cover.

Preparing the adjustable VTs

A: screw
B: nut
C: VR contact.



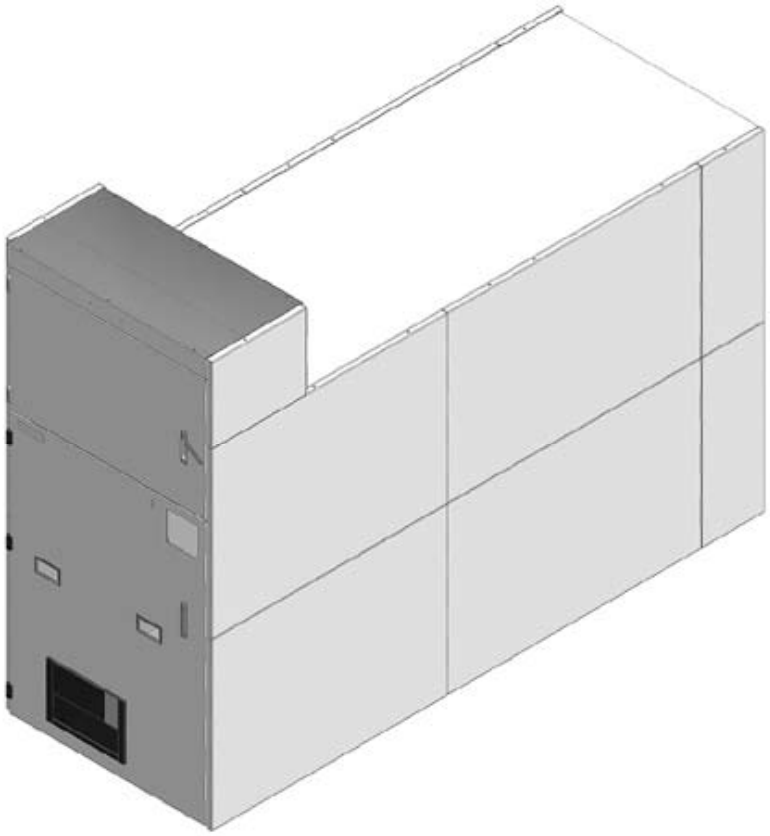
For cubicles equipped with adjustable voltage transformers, remove the screw **A** and nut **B** assembly.



Rotate adjustable voltage transformers once and check that the fuse end is in contact with **C**.
To rotate the adjustable voltage transformers, refer to the "**Operating Instructions**" section in user manual No. 07897171.

Mounting the end plates

A detailed installation drawing is supplied with the finish parcel.



		51164439FA	51164439FB	51164439FC
Component	**Component description**	**Qty**	**Qty**	**Qty**
51164152F0	Front bottom end plate	2	2	-
51310609F0	Front top end plate	1	1	-
51164154F0	Rear bottom end plate	2	2	-
51164155F0	Rear top end plate	-	2	-
51164440F0	Finish covering	-	-	1

Installation instructions
Standard cubicle

Left-hand side

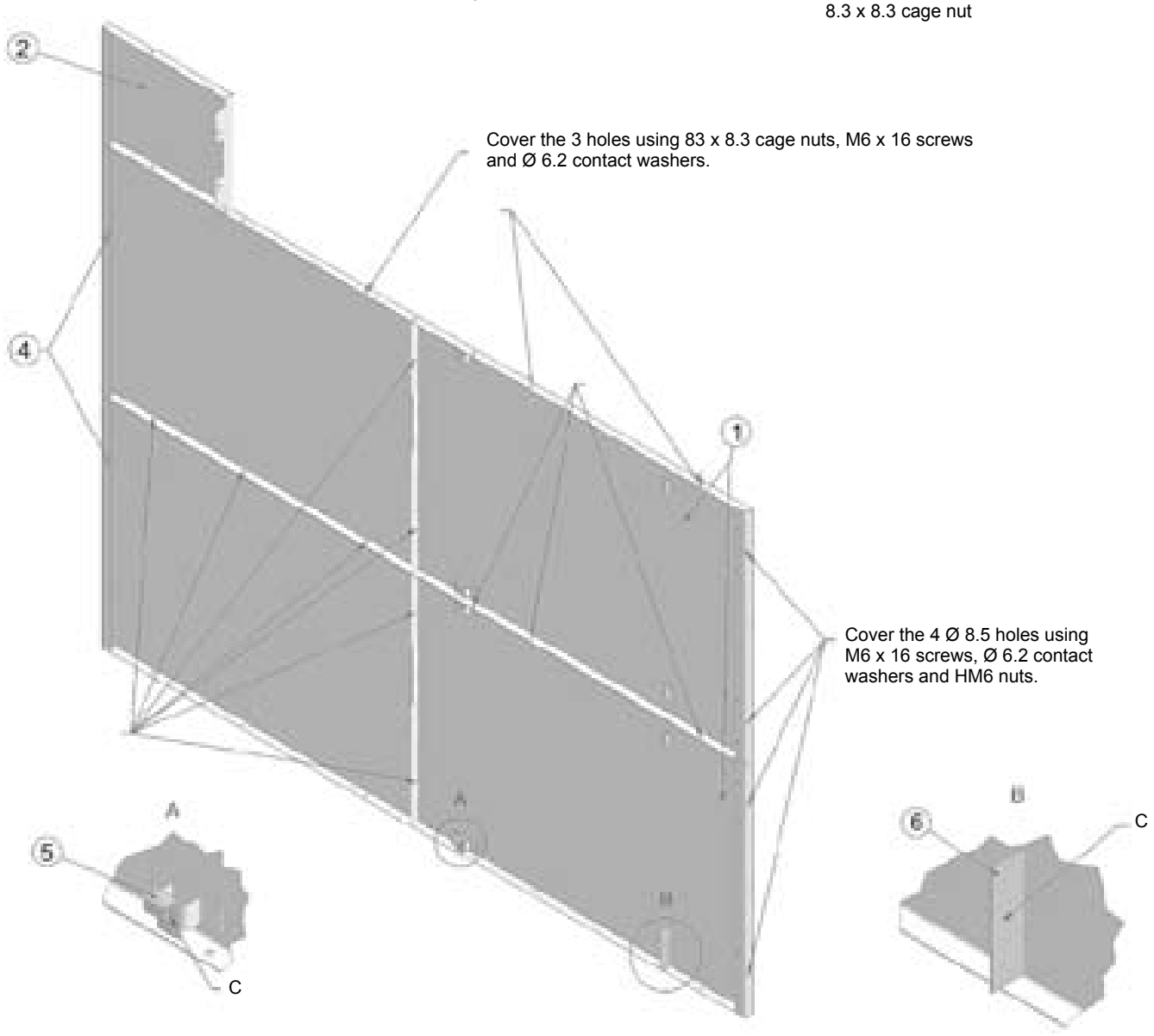
All fasteners and fastening accessories are located in parcel No.1. For 3 020 mm or deeper cubicles, an additional parcel contains the extra end plates.

Provide 3 m x 2 m floor space to fit the plates.

Preparation on the cubicle
Note: *the preparation is the same regardless of the FU depth.*

1: fasten angle bracket D by means of M12 bolts and washers and M12 cage nuts.

C: M6 x 16 screws
Ø 6.2 contact washer
8.3 x 8.3 cage nut


2
4
1
A
5
C
Cover the 3 holes using 83 x 8.3 cage nuts, M6 x 16 screws and Ø 6.2 contact washers.
Cover the 4 Ø 8.5 holes using M6 x 16 screws, Ø 6.2 contact washers and HM6 nuts.
B
6
C

51164439FA			
Item	**Part number**	**Description**	**Qty**
1	51164144F0	Rear bottom end plate	2
2	51310609F0	Front top end plate	1
4	51164152F0	Front bottom end plate	2
5	51164159F0	End plate hook (bag of fasteners)	1
6	51164199F0	Cover plate (bag of fasteners)	1

Installation instructions
Standard cubicle

Preparing the panels for 2670 mm long cubicle

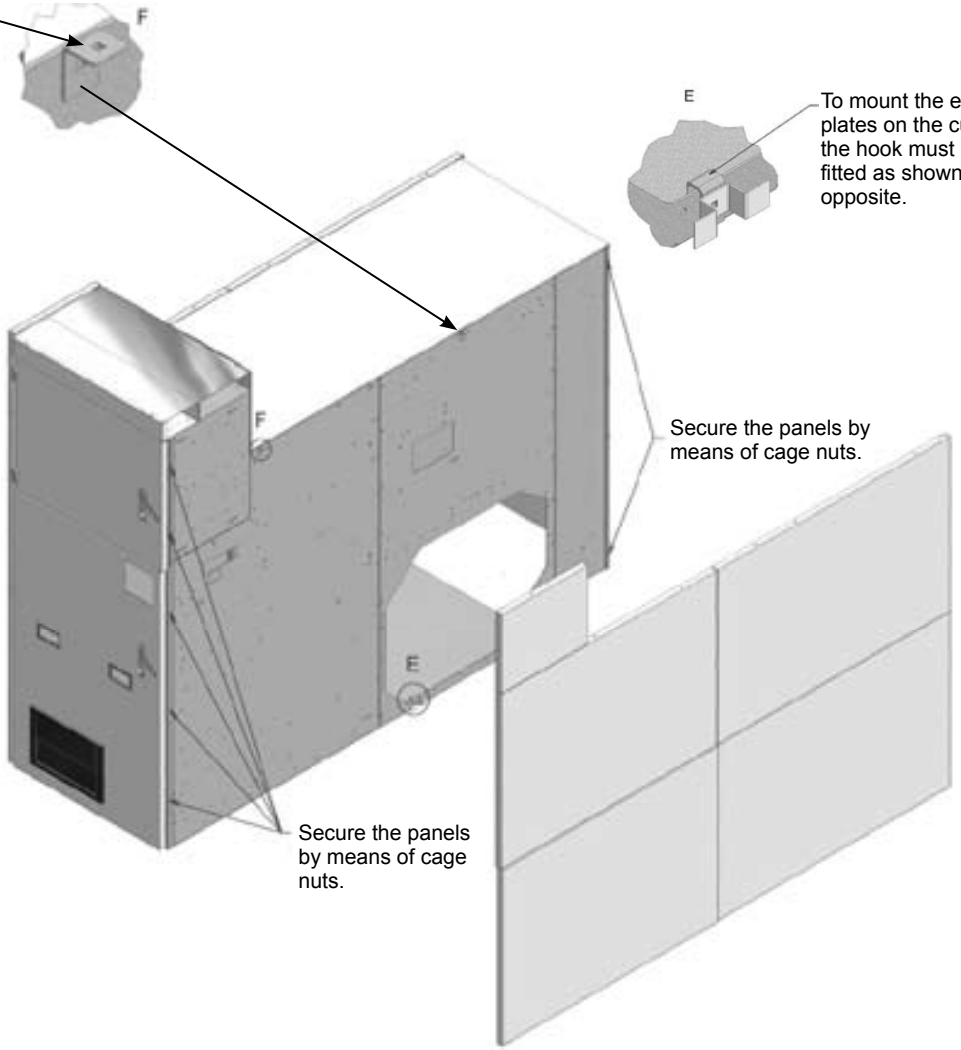
2: fit the 18 M6 cage nuts.

3: assemble the panels to one another by means of 9 HM6 x 16 screws + ribbed M6 conical washers.

4: blanking with 8 HM6 x 16 screws + ribbed conical M6 washers and M6 nut.
5: fit hook **C** by means of HM6 x 16 screws + ribbed conical M6 washers.

Secure the bracket on the cubicle, before installing the panels, by means of an H M12 x 30 screw and a Ø 12 contact washer.

Secure the end plates by means of a 8.3 x 8.3 cage nut, a M6 x 16 screw and a Ø 6.2 contact washer.


F
E
To mount the end plates on the cubicle, the hook must be fitted as shown opposite.
F
Secure the panels by means of cage nuts.
E
Secure the panels by means of cage nuts.

Installation instructions
Standard cubicle

Preparing the panels for 3020 mm long cubicle

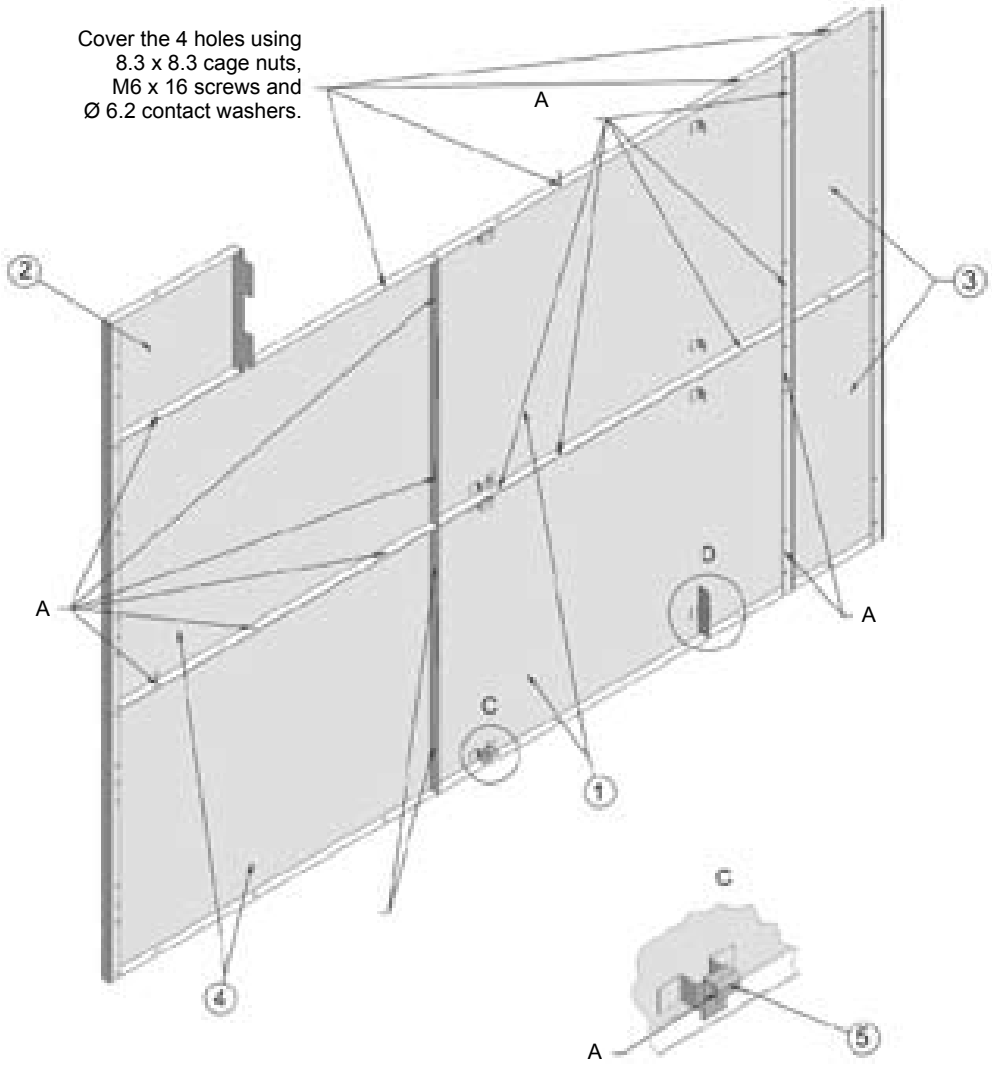
Left-hand side

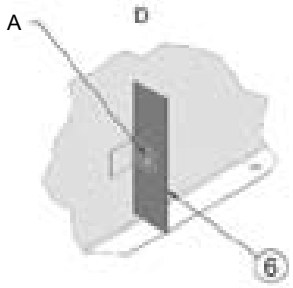
2: fit the 23 M6 cage nuts.

3: assemble the panels to one another by means of 13 HM6 x 16 screws + ribbed M6 conical washers.

Provide 3.5 m x 2 m floor space to fit the plates.

4: blanking with 5 HM6 x 16 screws + ribbed conical M6 washers and M6 nut.
5: fit hook C by means of HM6 x 16 screws + ribbed conical M6 washers.





A: M6 x 16 screws
Ø 6.2 contact washer
8.3 x 8.3 cage nut

51164439FB			
Item	**Part number**	**Description**	**Qty**
1	51164154F0	Rear bottom end plate	2
2	51310609F0	Front top end plate	1
3	51310655F0	Rear top end plate	2
4	51164152F0	Front bottom end plate	2
5	51164159F0	End plate hook (bag of fasteners)	1
6	51164199F0	Cover plate (bag of fasteners)	1

Installation instructions
Standard cubicle

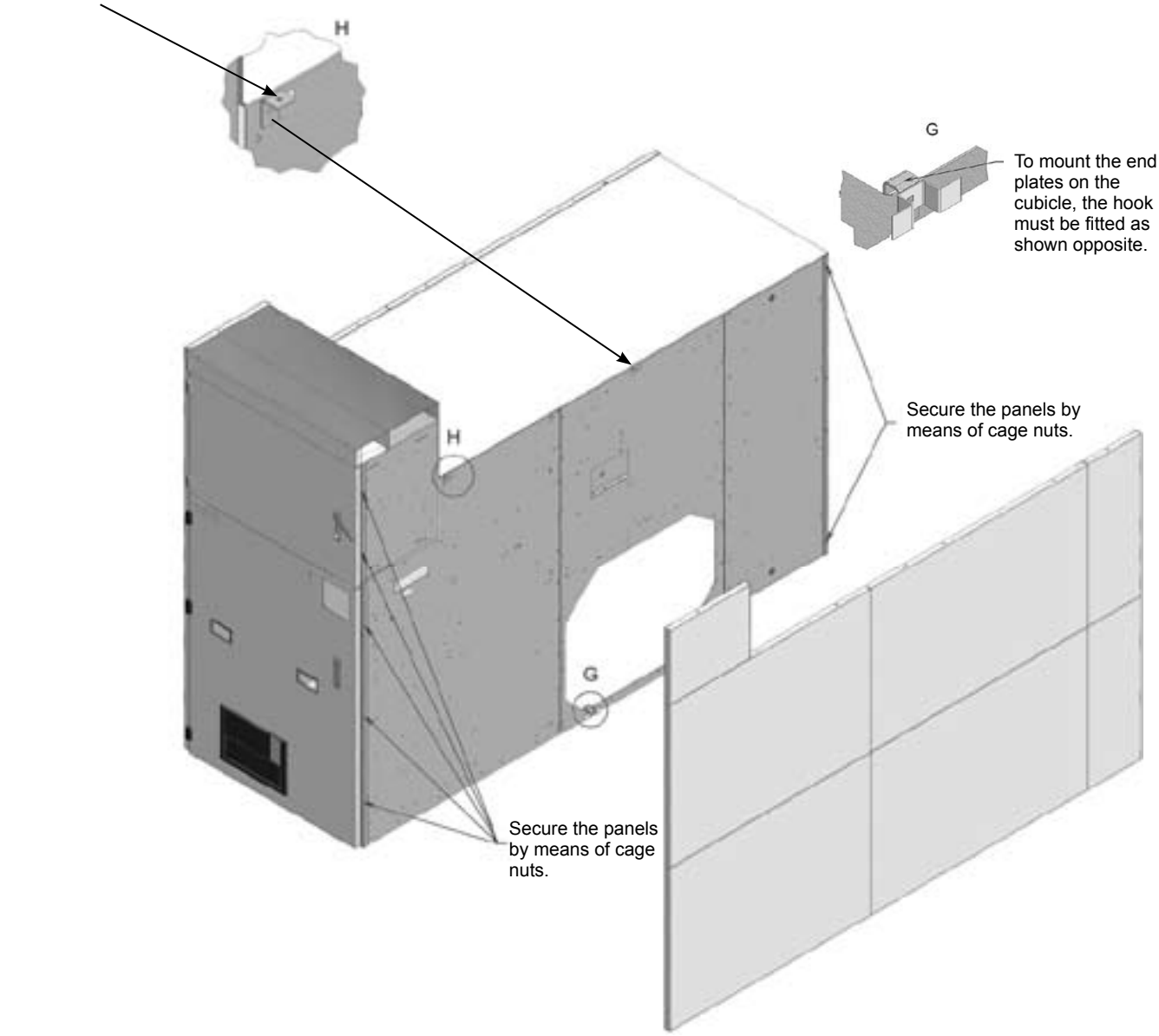
Positioning the assembly on the cubicle

6: installing the panels.
- Hook **C** on the cubicle side.
- Lean on **D**.
- Screw the assembly on the sides of the cubicle (9 fastening points) with HM6 x 16 screws + ribbed conical M6 washers + bolt on LV compartment (**F**).

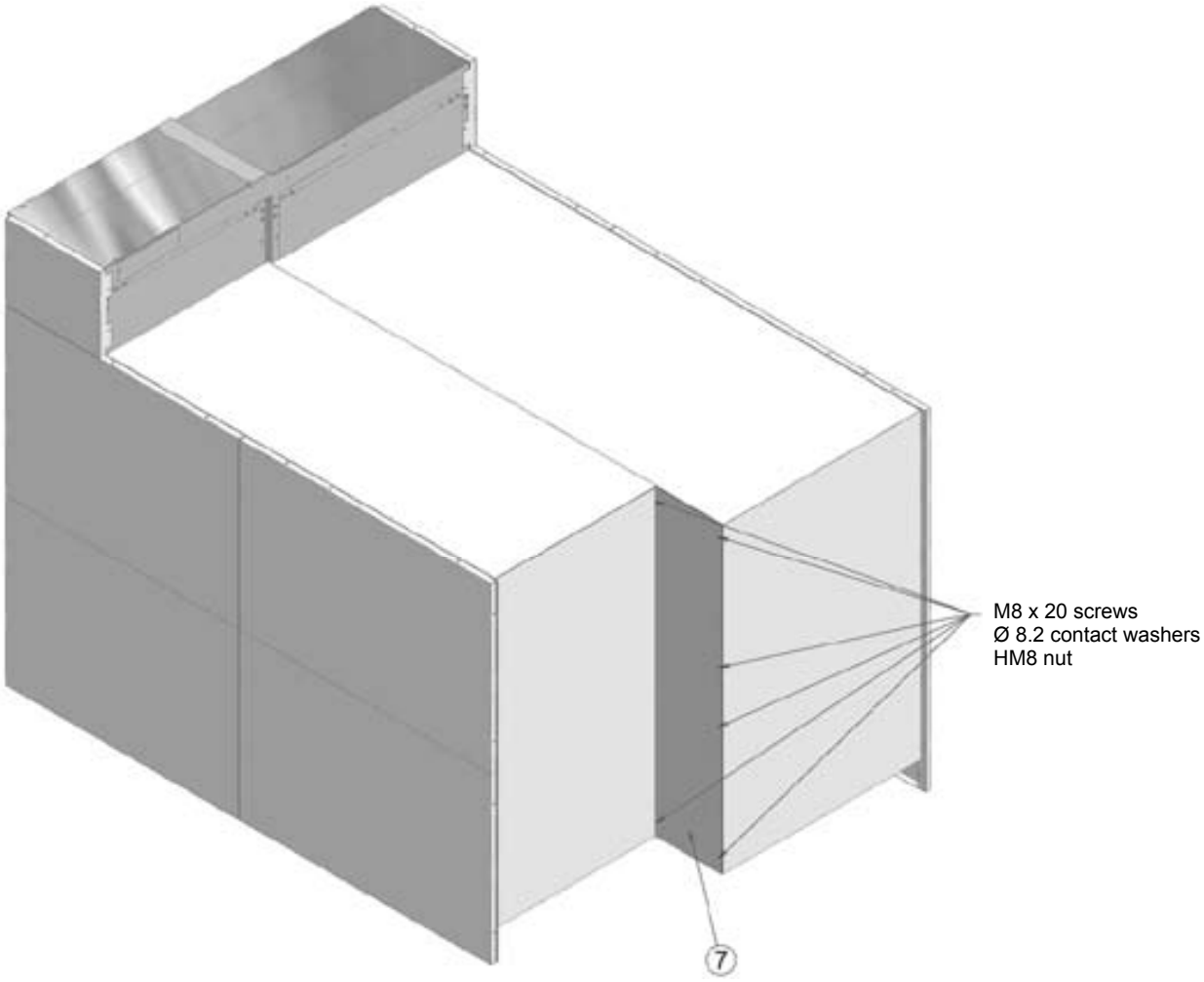
7: after installing the end plates, mount end plate **E** (at the rear of the cubicle) using HM6 x 16 screws + ribbed conical M6 washers.
This operation is performed in the cable compartment of the end cubicle.

Secure the end plates by means of a 8.3 x 8.3 cage nut, a M6 x 16 screw and a Ø 6.2 contact washer.

Secure the bracket on the cubicle, before installing the panels, by means of an H M12 x 30 screw and a Ø 12 contact washer.


H
G
To mount the end plates on the cubicle, the hook must be fitted as shown opposite.
H
Secure the panels by means of cage nuts.
G
Secure the panels by means of cage nuts.

Inter-cubicle lining



51164439FBC			
Item	**Part number**	**Description**	**Qty**
7	51164440F0	Finish covering	1

Installation instructions
Cubicle with internal arc withstand option

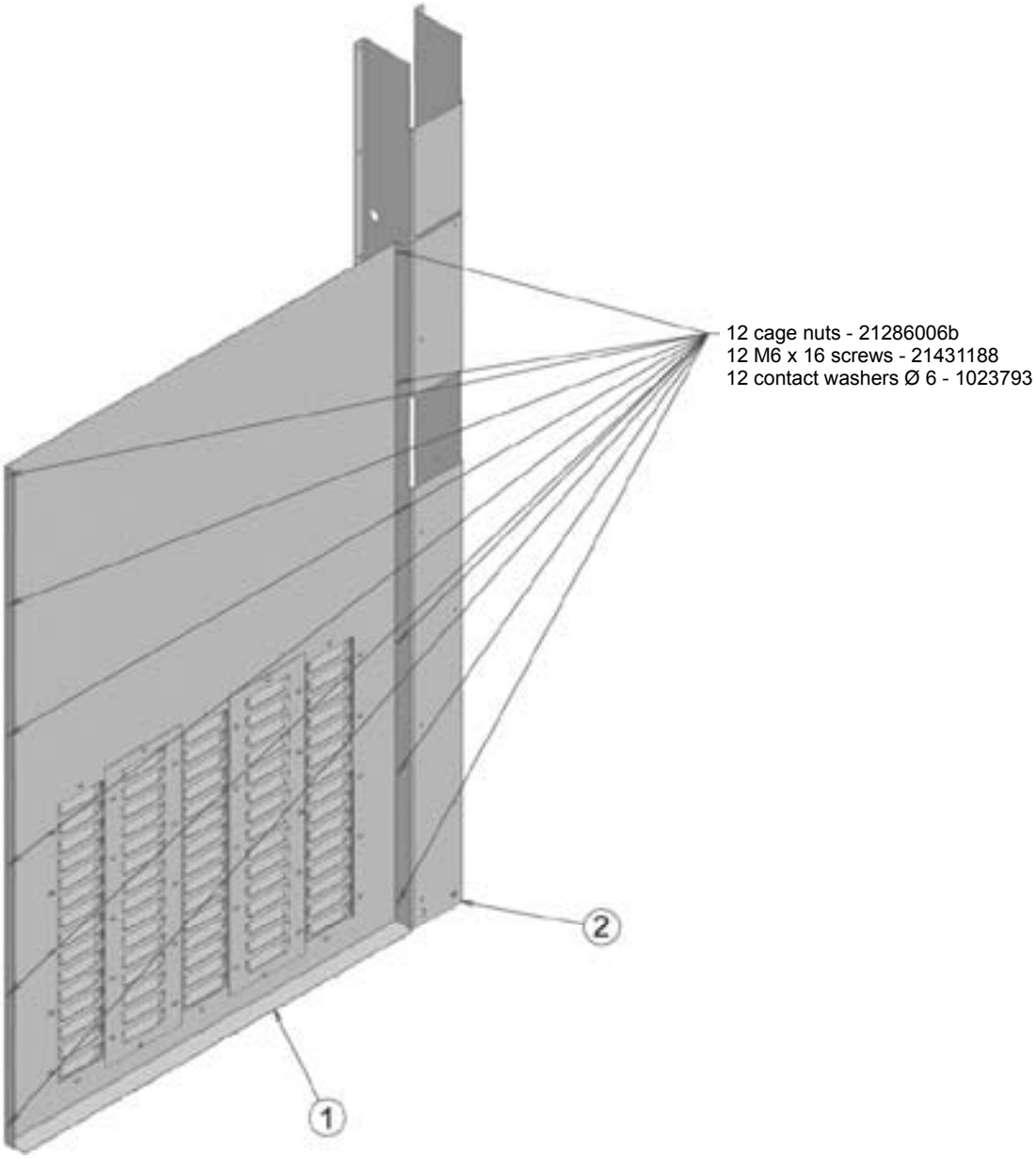
Mounting the end plates

A detailed installation drawing is supplied with the finish parcel.

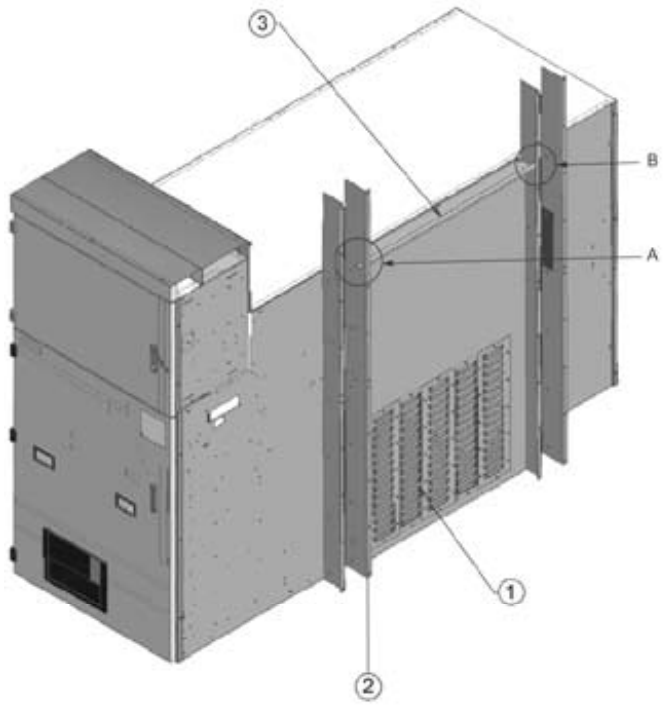
***Warning:** before fitting the end plates, you must remove the panels at the rear of the device.*

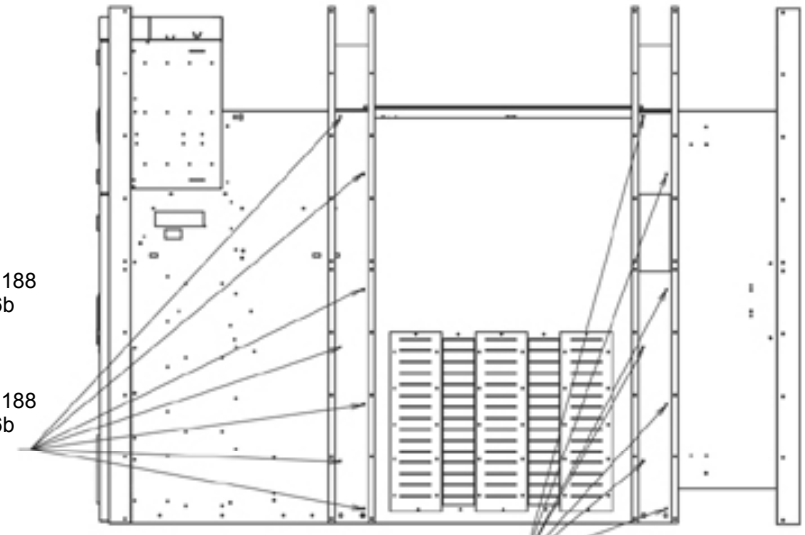
Parts list				
Item	**51164439FE**	**51164439FF**	**Description**	**Qty**
1	51310623F0	51310623F0	Fire-protective plate	1
2	51310610F0	51310623F0	Omega IA end plate	2
3	51310622F0	51310622F0	IA chimney flap	1
13	51310611F0	51310611F0	IA end beam	2
15	51310621F0	51310617F0	Rear D bottom end - IA	1
16	51310620F0	51310615F0	Front D bottom end - IA	1
17	51310619F0	51310614F0	Rear D top end - IA	1
18	51310618F0	51310612F0	Front D top end - IA	1
19	51310618F0	51310612F0	G and D middle bottom end - IA	1
20	51310613F0	51310613F0	G and D middle top end - IA	1
21	51310645F0	51310645F0	Connecting end panel	2
22	51310845F0	51310846F0	Right IA LVC end	1
24	51310847F0	51310847F0	Connecting end panel	2
25	51310710F0	51310710F0	Omega cover	1

Mounting the end plates



Parts list				
Item	**51164439FE**	**51164439FF**	**Description**	**Qty**
1	51310623F0	51310623F0	Fire-protective plate	1
2	51310610F0	51310610F0	Omega IA end plate	2





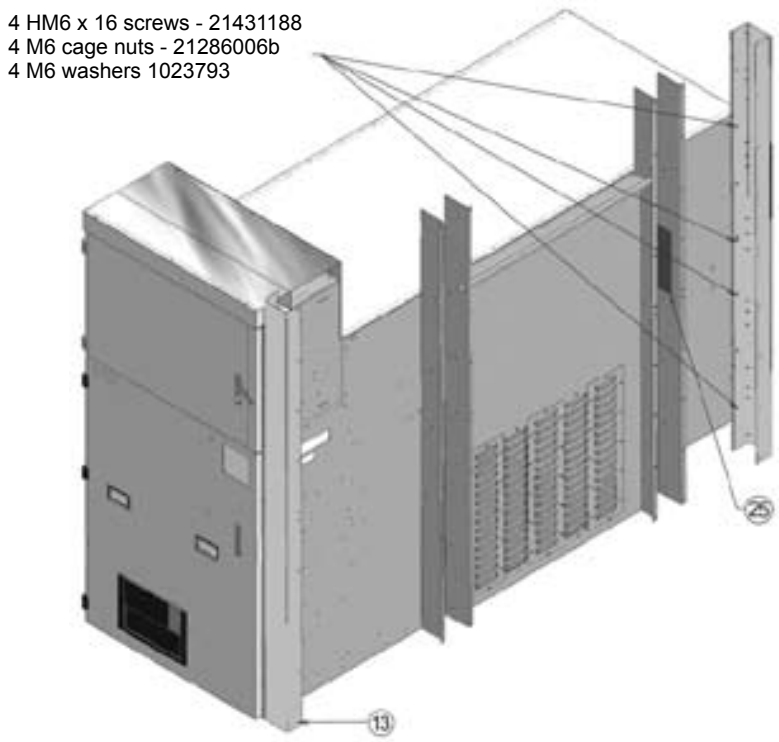
For the right-hand end:
7 HM6 x 16 screws - 21431188
7 M6 cage nuts - 21286006b
7 M6 washers 1023793

For the left-hand end:
8 HM6 x 16 screws - 21431188
8 M6 cage nuts - 21286006b
8 M6 washers 1023793

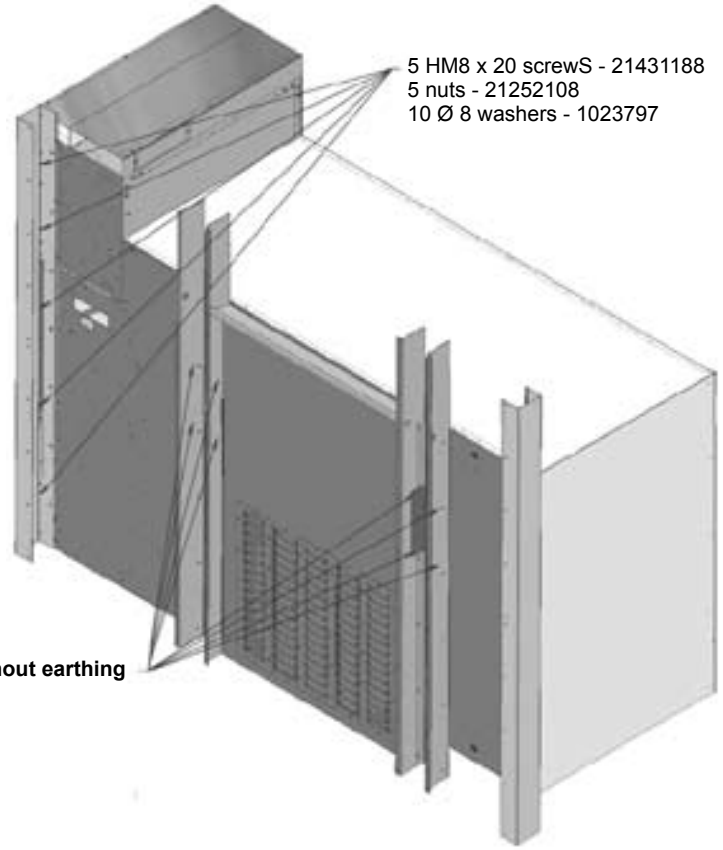
7 HM6 x 16 screws - 21431188
7 M6 cage nuts - 21286006b
7 M6 washers 1023793

Parts list				
Item	**51164439FE**	**51164439FF**	**Description**	**Qty**
1	51310623F0	51310623F0	Fire-protective plate	1
2	51310610F0	51310610F0	Omega	2
3	51310622F0	51310622F0	Chimney flap	1

4 HM6 x 16 screws - 21431188
4 M6 cage nuts - 21286006b
4 M6 washers 1023793



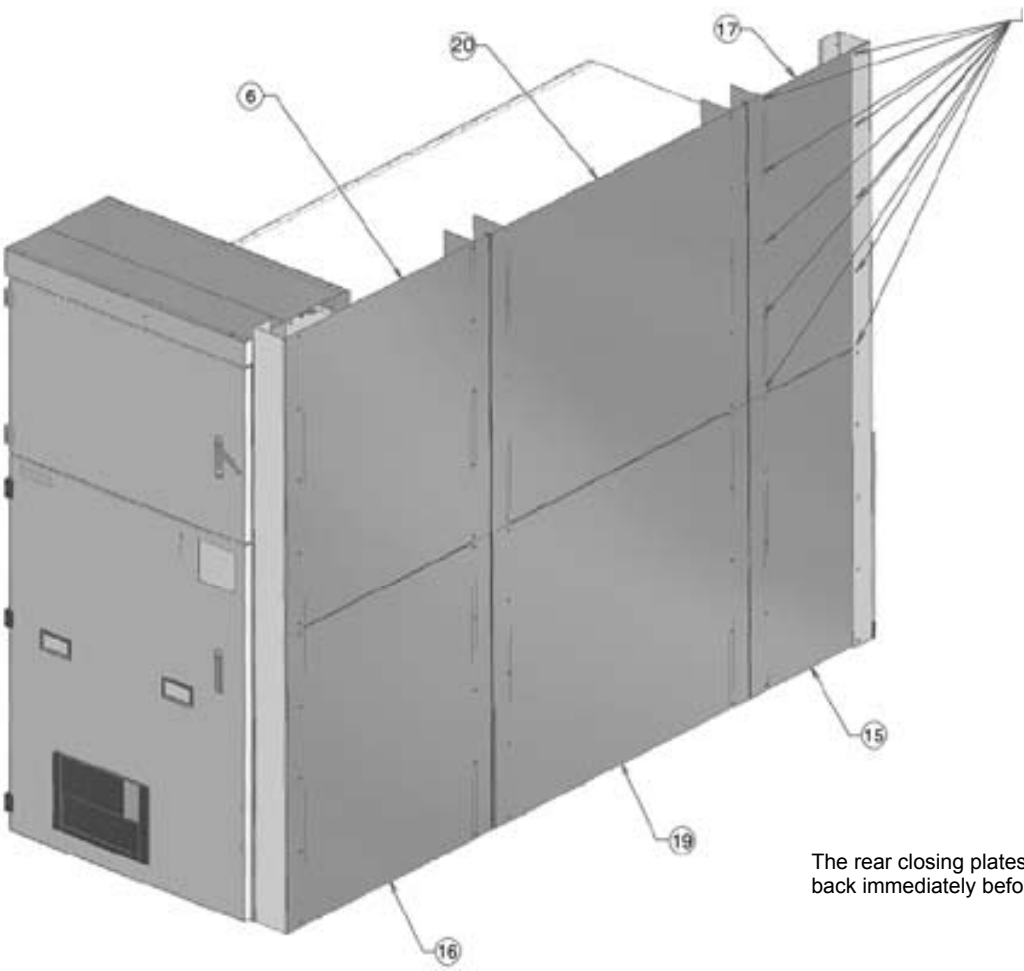
5 HM8 x 20 screwS - 21431188
5 nuts - 21252108
10 Ø 8 washers - 1023797



On the right, with a device with earthing isolator:
1 x 51310710F0
4 HM8 screws - 21252108
4 HM8 nuts - 21252108
8 Ø 8 washers - 1023797

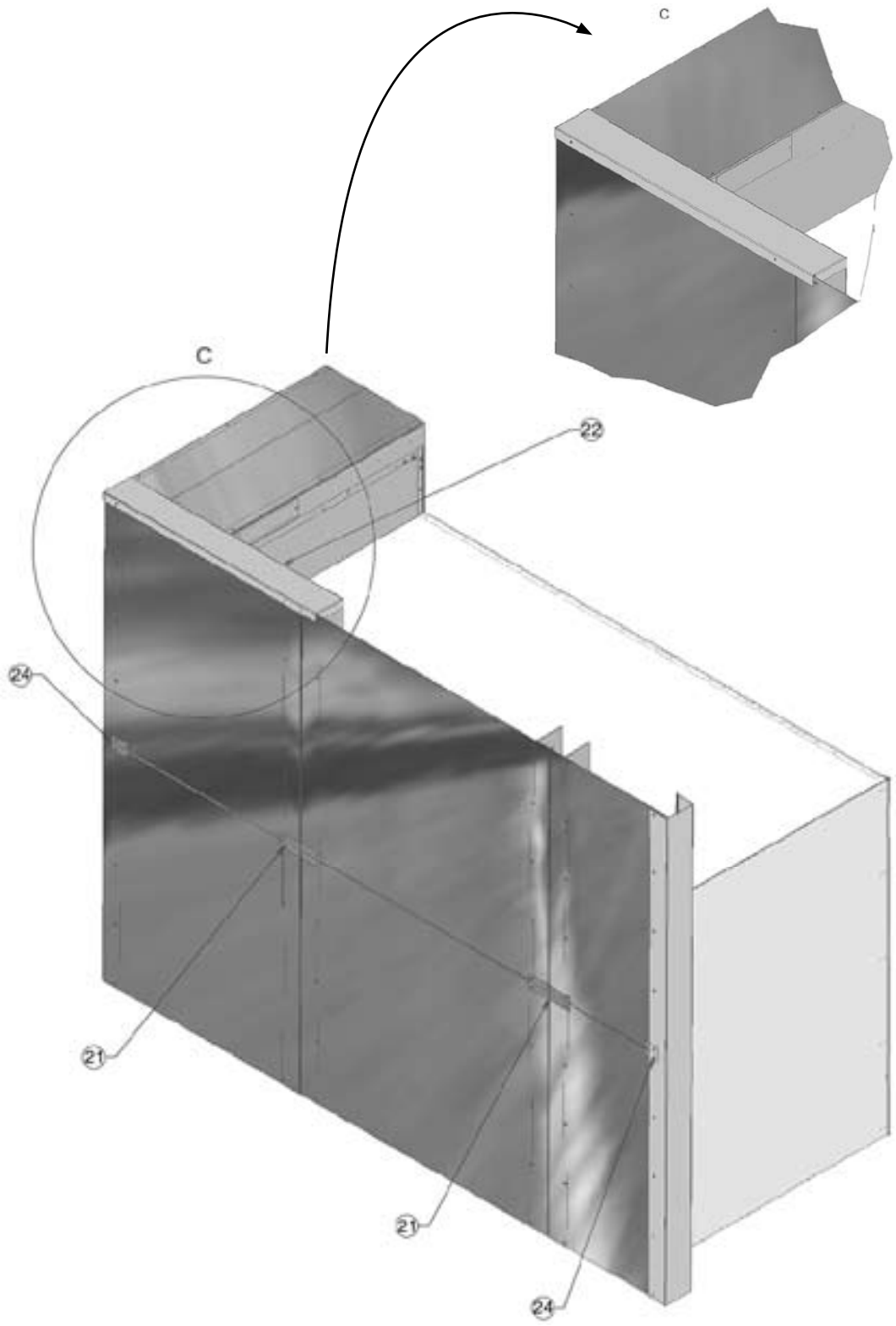
On the left or on the right, with a device without earthing isolator:
1 x 51310710F0
8 HM8 screws - 21252108
8 HM8 nuts - 21252108
16 Ø 8 washers - 1023797

Parts list				
Item	**51164439FE**	**51164439FF**	**Description**	**Qty**
13	51310710F0	51310710F0	Omega	2
25	51310611F0	51310611F0	End beam	1



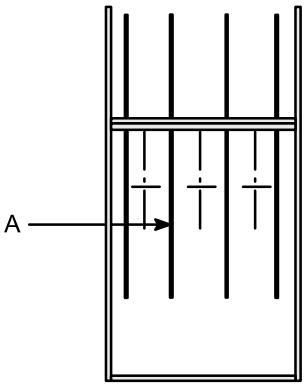
The rear closing plates of the device must be fitted back immediately before items 15 and 17.

Parts list				
Item	**51164439FE**	**51164439FF**	**Description**	**Qty**
6	51310618F0	51310612F0	Front top end	1
15	51310621F0	51310617F0	Rear bottom end	1
16	51310620F0	51310615F0	Front bottom end	1
17	51310619F0	51310614F0	Rear top end	1
19	51310616F0	51310616F0	Middle bottom end	1
20	51310613F0	51310613F0	G and D top end - IA	2

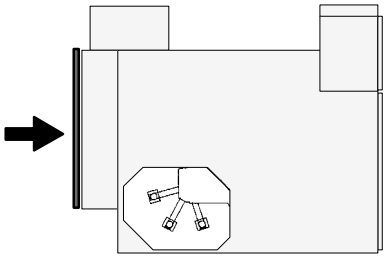


Parts list				
Item	51164439FE	51164439FF	Description	Qty
21	51310645F0	51310645F0	Connecting end panel	2
22	51310845F0	51310846F0	Right LVC IA end	1
24	51310847F0	51310847F0	Connecting end panel	2

Closing the MV cable compartment

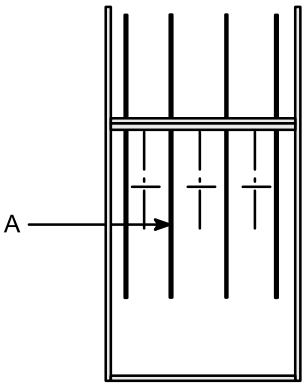


After mounting the MV cables and end plates, check the cleanliness of each MV cable compartment.
On all cubicles, put back the four shields **A**.

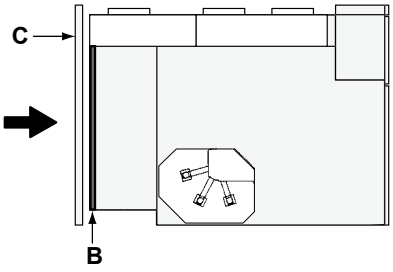


Put back the rear plate of the cable compartment.

Closing the MV cable compartment



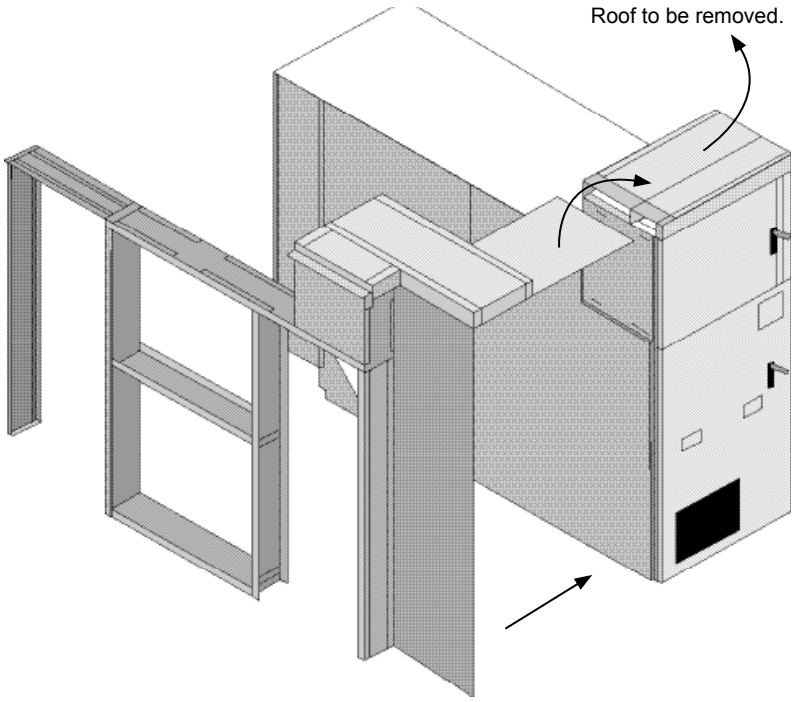
After mounting the MV cables and end plates, check the cleanliness of each MV cable compartment.
On all cubicles, put back the four shields **A**.



Put back rear plate **B** of the cable compartment.
Put back shield **C**.

Mounting the duct between F400G and F400NL

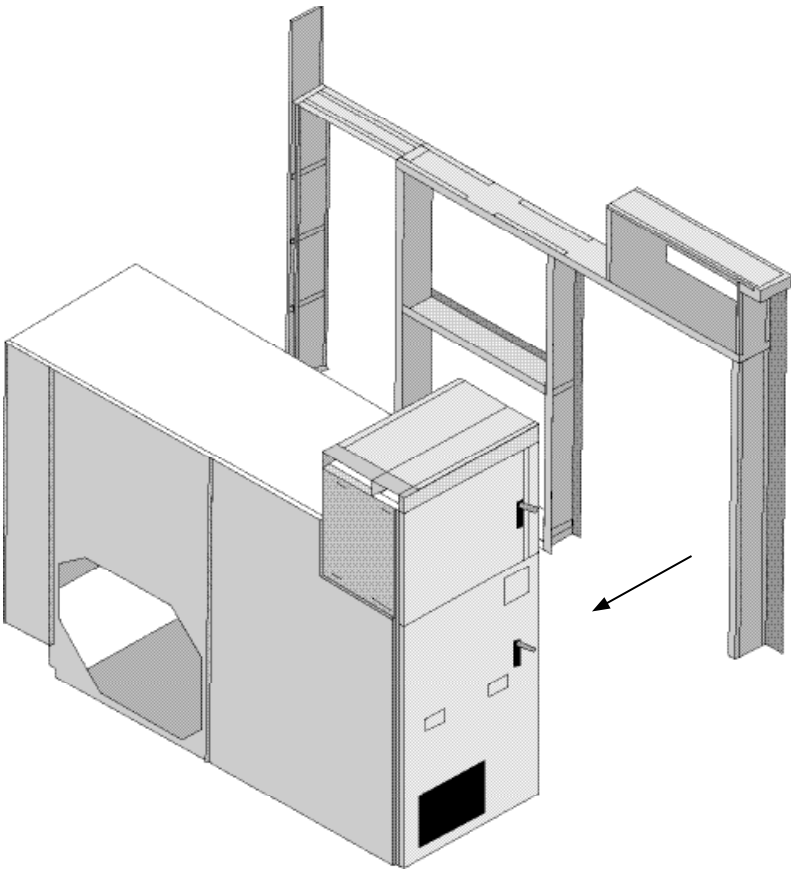
The transition duct between F400G and F400NL is supplied as a kit.
A detailed installation drawing for the duct is supplied in the parcel.



The transition duct is fastened between F400G and F400NL.

Mounting the duct between F400G and F400NL

The transition duct between F400G and F400NL is supplied as a kit.
A detailed installation drawing for the duct is supplied in the parcel.



The transition duct is fastened between F400G and F400NL.

Schneider Electric service centres provide:
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